ASHRAE Honor Roll

CLYDE EQUIPMENT COMPANY, INC.
MANUFACTURERS REPRESENTATIVES
920 GRAYSON STREET, BERKELEY, CA 94710
(510) 845-6130 / Fax (510) 845-7465
INTERNET:76552.505@COMPUSERVE

* AERCO INTERNATIONAL * KEWANEE BOILER * PARKER BOILER *
* THERMAL SOLUTIONS *

Servicing all your steam, heating hot water and domestic hot water needs . . .

Golden Gate Chapter
ASHRAE
41 Sutter Street Suite 401
San Francisco CA 94104-4903

FIRST CLASS MAIL

RICHARD A CHARLES
C & B CONSULTING ENGINEERS
150 Spear St Ste 500
San Francisco CA 94105-1537

FOG DISPENSER

Golden Gate Chapter ASHRAE

VOLUME XXXVII - NUMBER 9 JUNE, 1998

THURSDAY JUNE 4, 1998

Spouse Night
Past President's Night

Location: Gabbiano's (upstairs)
1 Ferry Plaza, San Francisco, CA

Social Hour: 5:30 pm downstairs

Speaker: Peter Simmonds
Flack & Kurtz Consulting Engr's
"Environmentally Responsible HVAC Design"

Dinner: 6:30 pm

Cost: $30.00

To Reserve: Please email or fax your dinner reservation to Kent Lim by Monday, June 1st. A fax form is included for your convenience.

Phone: (415) 822-1232
Fax: (415) 822-6437
Email: **ashrae@essinc.com**

Gabbiano's is located near Pier 2, behind the Ferry Building (Clock Tower), one bolck from the Embarcadero BART station.

"Environmentally Responsible HVAC Design"

Peter Simmonds' presentation will have two objectives; first, he will present a visual overview of numerous and diverse projects Flack & Kurtz is involved with around the world and how responsible design decisions can have a positive impact on the environment.

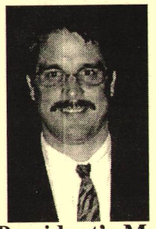
Second, he will give a tongue-in-cheek perspective of what an engineer might do in designing and developing an HVAC system. He will highlight certain parts of building services, such as temperature control, refrigeration and air-conditioning systems and relate these systems to common domestic items everyone is familiar with.

This presentation is sure to be both educational and entertaining.

Peter Simmonds has been designing building envelopes, HVAC systems and specialized refrigeration systems since 1977. He worked as a consultant in the Netherlands until 1994.

Peter first started with Flack & Kurtz in their New York office and moved to San Francisco a year ago. He has one B.S. in Mechanical Engineering and another in Research and Development, a M.S. in HVAC and a Ph.D. from the University of Manchester, Science and Technology. He is a visiting professor at Carnegie Mellon University and has lectured at the University of Colorado at Boulder, LBL, Bolton Street College, Dublin and TU Delft. He is involved in numerous ASHRAE Technical committees, including:

TC 2.1 Physiology and Thermal Comfort, corresponding member
TC 4.6 Building Operation Dynamics, member
TC 6.5 Radiant Heating and Cooling, member
TC 6.9 Thermal Storage



June President's Message

For those of you that watched Seinfield instead of going on the field trip, you should have taped it. It was an awesome field trip to SFO Central Plant. I have looked at large equipment before but this stuff was huge, like Godzilla size does matter, a 6,000 ton chiller, a couple 3,000 ton chillers, a 50 million Btu/hr and two 25 million Btu/hr boilers that feed a high temperature and high pressure water system. Thanks to Larry Jessup, director of Utilities and Maintenance, our host and tour guide. The folks that arrived there early enough to board the first bus got a bonus tour of the new main terminal under construction. It was a rare opportunity to see such a significant project in progress. Thanks to Scott Company for hard hats and tour.

Here we are at the end of another ASHRAE year. What a great year it has been! I want to thank everyone for their contributions; The 1998 Host committee for a fantastic Winter Meeting, the committee chairs for all of their efforts throughout the year, and the Board of Governors for their endless support and diligence to get the job done. THANKS!!!

Speaking from experience, being involved does take time but it pays back double. The people are stellar. The satisfaction of accomplishment and contribution is a great feeling. I encourage all of you that have not been involved to try it out. I think you will really enjoy the ASHRAE experience.

Respectfully submitted,
Dan Reiter, President

PS. Don't forget June 2nd is Election Day and Proposition 224 affects you greatly! Vote!!

Fog Dispenser Deadlines

The ninth of the month preceding the meeting. All the news that fits gets printed.

Mail, fax, phone or email News by the 9th of the month preceding the meeting to:

FOG DISPENSER
Debbie Marshall, Editor, PACO Pumps
845 92nd Ave, Oakland, CA 94603
Telephone 510/639-3200. Ext. 232
Fax 510/639-3337
email PACO_OAK@Pacbell.Net

Photojournalism Editor: Mike Scofield

Refer prospective new members to
Membership Chair:

John Small----------408/866-0723
FAX----------408/866-5899

For Roster corrections and address changes contact:
1/800/5ASHRAE

GGC database is based on the National Database. You need to contact national in order to change local information. This may take a couple of months.

Published monthly, October through June, by the **Golden Gate Chapter Of the American Society of Heating, Refrigerating and Air-Conditioning Engineers**, c/o Duplicating Associates, 41 Sutter St., Ste. 1401., San Francisco, CA 94104-4903

1997-1998 OFFICERS

Dan Reiter.....President
Ernie French.....President Elect
Mark Hydeman.....Secretary
Ben Sun.....Treasurer

Board of Governors
Kent Lim, Joe Olivier, Dennis Thompson

ASHRAE GOLDEN GATE CHAPTER 1997-1998 COMMITTEES AND CHAIRPERSONS

Attendance	Dick Charles	Awards	Barbara Dilts	Auditing	Thomas Gilbertson
BAEC	Tom Reinarts	By-Laws	Roy Gifford	CRC Action	Ernie French
Database Manager	Allan Daly	Student Activities	Jim Brugger	Fog Dispenser	Debbie Marshall
Golf	Dave Eisenberg	TEGA	Gary Margadant	Historian	
Honor Roll	Bob Levi	Marble Game	Edgar DeGuzman	Membership/Picnic	John Small
Product Show	N/A this year	PAOE	Dennis Thompson	Program	Ernie French
Publicity	Mike Scofield	Reception	Jean Choi	Refrigeration	Dave West
Research	Bob Levi	Roster	Tim Provo	Website	Robert Marcial
Seminar	N/A	Tennis	Rich Leao	1998 Meeting	Tom Reinarts

News From The North

The Redwood Empire Section has announced the following schedule for the 1998-1999 season as announced in the *Grapevine,* Spring 98 edition:

September 2, 1998 – 5:30 pm (spouse's night) at Jonesy's Famous Steak House in Napa. Speaker will be Rob Andrews of the San Francisco Giants. The topic is the Giants' Fantasy Camp.

December 2, 1998 – 5:30 pm at Adobe Creek Golf Club in Petaluma. Speakers will be Mike Ratcliff, PhD, PE of Ratcliff Associates, and Atto Paul of TSI, Inc. The topic is Laboratory Fume Hood and Stack Design.

March 3, 1999 – 5:30 pm at Jonesy's in Napa. Speakers will be Jan Black, PE of Peters Engineering, David Knebel, PE of Commercial Environmental Systems Group, Inc., and Don Schumacher, Air Research Diffuser Products, Inc. The topic is Low Temperature Supply Air Design – The Intel Santa Clara Installation.

June 2, 1999 – 5:30 pm at Adobe Creek Golf Club in Petaluma. Speaker will be Jeff Blaevoet, PE of Guttman and Blaevoet. Topic is Under Floor Supply Air System Design.

The following announcement is not endorsed by the Golden Gate Chapter of ASHRAE but is printed to provide the membership with information.

"PROPOSITION 224 / HVAC&R ENGINEERS

A "yes" vote could mean that engineers in private practice would have to quit and work for the State of California. For information on the ballot and Pro and Con arguments submitted by engineers such as yourselves, visit my Web site at www.connet.com."

Ed McJunkin, PE
HVAC&R engineer
Life Member and recent GG Chapter member

EMPLOYMENT OPPORTUNITIES

****

Mechanical Engineer

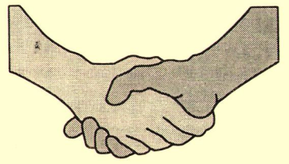
Experienced in HVAC and Plumbing design, project management. PE preferred. Established consulting office in Sebastopol (Sonoma County), with benefits. Projects include wineries, industrial, commercial and schools. Resume and salary requirements to: **Larkin & Associates, Inc., PO Box 2339, Sebastopol, CA 95472. Fax: 707/823-9363.**

Newcombe Anderson Associates, an innovative San Francisco based energy consulting firm, is seeking mechanical and electrical designers, analysis engineers and construction cost estimators. For more information about our company and employment opportunities, please visit www.newcombanderson.com or fax inquiries to 415/434-2321, attn: recruiting. Full benefits, excellent work environment, equal opportunity employer.

@@@@@@@@@@@@@@@@@@@@@@@@@@

The Staff of The Fog Dispenser want to thank everyone for their contributions to our newsletter. Special thanks to Mike Scofield for the many wonderful photos taken throughout the year!

Hopefully everyone will have a pleasant summer!!! (If we ever get any decent warm weather!)



ASHRAE GOLDEN GATE CHAPTER
DINNER RESERVATION FAX

For THURSDAY, June 4th, 1998
Please send Fax by noon on Monday, June 1st, 1998

FAX TO: **Kent Lim, Kent Lim & Company, Inc.**
FAX: **(415) 822-6437**
Phone: **(415) 822-1232**
e-mail: ashrae@essinc.com

Please call if you have any last minute changes in plans.
Please cancel your reservation if you cannot attend the meeting.

Preferred method of communication!

FROM: DICK CHARLES

COMPANY: C&B ENGINEERS Phone: 442 0150

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

DICK [redacted] CHARLES
EUGENIA BLUMENTAL
TIM CASADOS
CINDY REGNIER
JEFFREY DITTMAN

LOCATION: Gabbiano's (upstairs) 1 Ferry Plaza, San Francisco, CA (415) 391-8403

Gabbiano's is located near Pier 2, behind the Ferry Building (Clock Tower), one block from the Embarcadero BART station. Limited parking is available along the Embarcadero. Valet parking is also available.





ASHRAE RESEARCH

June is the final month of the ASHRAE fiscal year. So all donations must be in by the end of June. Remember that your contribution is an investment in the future of the HVAC industry and our jobs, so please invest generously.

ALL 1997-98 investors will be listed in the first issue of the Fog Dispenser this fall, so even those contributing in June will be recognized.

Thanks to the following new Individual Honor Roll participants:

Ron Arthur
Gerald Yaffe

Thank you to the following new Corporate Honor Roll participants:

Clyde Equipment Company
Horn Engineers
Keller & Gannon
Mechanical Contractors Association

Please make your check payable to ASHRAE Research and mail to:

Robert Levi, c/o Carrier Corporation
P. O. Box 23130, Oakland, CA 94623
510/635-1237

If you would rather charge your donation to a credit card (American Express, MasterCard, VISA) please pick up one of the donation envelopes at the June meeting, or call Bob Levi to request one, or call Bob to donate over the telephone.

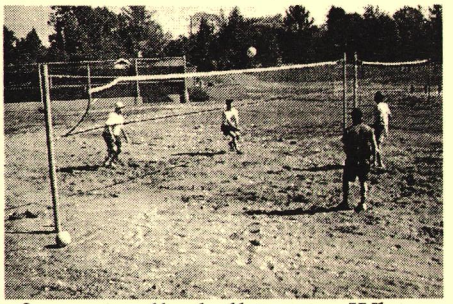
A Blast From the Past



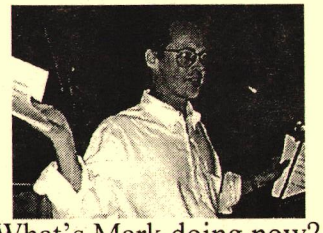
The picnic with the Redwood Empire.



Edgar, hawking his tickets.



The infamous volleyball game. Who won???



What's Mark doing now?

Golden Gate Chapter
ASHRAE
41 Sutter Street Suite 401
San Francisco CA 94104-4903

FIRST CLASS MAIL

RICHARD A CHARLES
C & B CONSULTING ENGINEERS
150 SPEAR ST STE 500
SAN FRANCISCO CA 94105-1537

RECEIVED
MAY - 4 1998
C&B CONSULTING ENGINEERS

ASHRAE Honor Roll

Carrier

CARRIER CORPORATION

10810 Bigge Street, San Leandro, CA 94577
Phone: (510) 635-1237
Fax: (510) 635-3244

Centrifugal, Rotary Screw, and Absorption Chillers
Air Handling Units, Controls
New Equipment Sales, Service, and System Retrofit
San Francisco / East Bay / San Jose / Sacramento / Reno

Local Area Sales Staff
Bob Levi, Jeff Kerl, Mark Wolfe, John Burdette, Phil Williams, Tony DeMeo, Mark Lindberg, Phil Bakarich, George Eiler, Bruce August, Mike Volckaert, Chris Countryman

FOG DISPENSER

Golden Gate Chapter ASHRAE

VOLUME XXXVII - NUMBER 8 MAY, 1998

HAPPY MOTHER'S DAY

****The month's meeting will be held a week later than normal on Thursday, May 14th.****

It looks like we passed all security clearances and will be able to tour the San Francisco International Airport's Central Plant!!!

Location: San Francisco International Airport

IMPORTANT: Meet at the Pacific Energy Center, 851 Howard St, to catch the bus to the airport

Registration: 5:30 – 5:50 at the Energy Center. Bus will leave at 5:59 pm sharp!

Speaker: SFIA, Central Plant

Dinner: Approximately 7:15 at Chevy's

Cost: $30.00 includes bus and some drinks with dinner.

To Reserve: Please e-mail or fax your dinner reservation to Kent Lim by Monday, May 11. A fax form is included for your convenience.
Phone: 415/822-1232
Fax: 415/822-6437
Email: ashrae@essinc.com
&&&&&&&&&&&&&&&&&&&&&&&&&&&&
Don't forget to sign up for the Golf Tournament!! It sounds like a lot of fun and is a great way to help raise needed funds!!!
&&&&&&&&&&&&&&&&&&&&&&&&&&&&

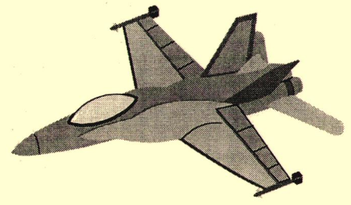
ANNUAL FIELD TRIP

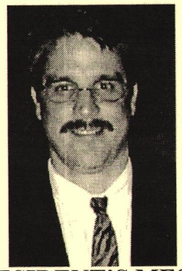
San Francisco International Airport

The San Francisco International Airport is the site of the largest construction project in the Bay Area. As most of us have observed, the construction of a new International Terminal, two new boarding areas, a new rental car facility, and the BART extension are reshaping this already large facility.

This year's field trip features a unique opportunity to tour the Central Plant at SFIA. The central plant serves the entire airport and includes some of the largest chillers on the West Coast.

Our Host for this tour is Mr. Larry Jessup, Director of Utilities and Maintenance at the Airport. This is sure to be a most interesting and educational tour.





MAY PRESIDENT'S MESSAGE

As we are approaching the end of the ASHRAE year I can feel momentum building for a great next year. It is so nice to see members step forward to volunteer to be committee chairs; Robin James for Student Activities, Allan Daly for Database, Gary Margadant for TEGA, Tom Gilbertson for Auditing and I know I've forgotten someone. You should thank these members and the others who chair committees because they are the ones who make the Chapter Machine run.

It is also great to see more members and companies making their commitments for ASHRAE Research, unfortunately we still need significant contributions to meet our target. Don't be afraid to call Bob Levi, you can donate large or small. It is all paid back to us through the benefits of Research results.

Another sign of forward motion is the evolution of our electronic tools. Besides our database you know of our website, however we have a new address: www.ggashrae.org. Check it out!

Exciting Field Trip to SFO!! Don't miss it! For those who missed last year's trip the dinner at Chevy's following is a good time too!! Also, we will have students from Oregon Institute of Technology coming so please sponsor students.

See you there!

Respectfully Submitted,
Dan Reiter, President

Fog Dispenser Deadlines
The ninth of the month preceding the meeting. All the news that fits gets printed.

Mail, fax, phone or email News by the 9th of the month preceding the meeting to:
FOG DISPENSER
Debbie Marshall, Editor, PACO Pumps
845 92nd Ave, Oakland, CA 94603
Telephone 510/639-3200. Ext. 232
Fax 510/639-3337
email PACO_OAK@Pacbell.Net

Photojournalism Editor: Mike Scofield

Refer prospective new members to
Membership Chair:

John Small----------408/866-0723
FAX----------408/866-5899

For Roster corrections and address changes contact: 1/800/5ASHRAE

GGC database is based on the National Database. You need to contact national in order to change local information. This may take a couple of months.

Published monthly, October through June, by the **Golden Gate Chapter Of the American Society of Heating, Refrigerating and Air-Conditioning Engineers**, c/o Duplicating Associates, 41 Sutter St., Ste. 1401 San Francisco, CA 94104-4903

1997-1998 OFFICERS

Dan Reiter.....President
Ernie French.....President Elect
Mark Hydeman.....Secretary
Ben Sun.....Treasurer

Board of Governors
Kent Lim, Joe Olivier, Dennis Thompson

ASHRAE GOLDEN GATE CHAPTER 1997-1998 COMMITTEES AND CHAIRPERSONS

Attendance	Dick Charles	Awards	Barbara Dilts	Auditing	Thomas Gilbertson
BAEC	Tom Reinarts	By-Laws	Roy Gifford	CRC Action	Ernie French
Database Manager	Allan Daly	Student Activities	Jim Brugger	Fog Dispenser	Debbie Marshall
Golf	Dave Eisenberg	TEGA	Gary Margadant	Historian	
Honor Roll	Bob Levi	Marble Game	Edgar DeGuzman	Membership/Picnic	John Small
Product Show	N/A this year	PAOE	Dennis Thompson	Program	Ernie French
Publicity	Mike Scofield	Reception	Jean Choi	Refrigeration	Dave West
Research	Bob Levi	Roster	Tim Provo	Website	Robert Marcial
Seminar	N/A	Tennis	Rich Leao	1998 Meeting	Tom Reinarts

ASHRAE RESEARCH

Thanks to all those who have invested in ASHRAE Research for 1997-98. Unfortunately we are still below 50% of our goal and we only have May and June left. If you have not donated yet you will be receiving a call asking for your investment. Please save us some time and send or call your investment in.

Thanks to the following new Individual Honor Roll participants:
Gail Brager
Robert DeChene
John O'Brien

Thank you to the following new Corporate Honor Roll participants:
American Mechanical Services
Belimo Aircontrols
Carrier Corporation
Flack + Kurtz
Johnson Controls
Pacific Coast Trane
York International

Thanks to Tempco Equipment Company for another investment at the Honor Roll level.

Please make your check payable to ASHRAE Research and mail to:
Robert Levi, c/o Carrier Corporation
P. O. Box 23130, Oakland, CA 94623
510/635-1237
If you would rather charge your donation to a credit card (American Express, MasterCard, VISA) please pick up one of the donation envelopes at the May meeting, or call Bob Levi to request one, or call Bob to donate painlessly over the telephone.

We are very happy with the response the ASHRAE members have shown for this year's golf tournament being held at the Sunol Valley Golf Club on Friday, June 26, 1998. The golf committee would like to thank the following companies and team captains for their generous support of ASHRAE.

Respectfully,

David Eisenberg

Norman Wright:	Sal Giglio, Mike Rubio, Robert Ghoukassi, Steve Dobberstein
	Pat Burke, Tim Knoop, Fred Parker, Kurt Shoening
Trane:	Dennis Thompson, Gary Rich, Dan Hall Todd Elmgren
	Dale Mauldin, Kim Tan, Nick Huetter
Westates Pacific:	Saul Villanueva, Dan Hornak
ACCO:	Bill Call
DMG North:	Tom Graham, Steve Nemic
Honeywell:	Mac Parfet
Air Treatment:	Charlene Sturm
Cal Hydronics:	Bob Polizzi
Harold Wells:	Jim Hoyt
Thermal Mech.:	Denny Mark
Carl Jordan:	Carl Jordan

There are still a few sponsorships available, and of course tickets for non-golfers who want to join in at the awards ceremony are available at $20.00 each (6 for $100.00).

ASHRAE
GALA SPRING GOLF TOURNAMENT



Where: Sunol Valley Golf Club
Sunol, California

When: Friday, June 26th, 1998

Time: Sign in @ 11:00 a.m.
Shotgun starts @ 12:30 p.m.
Dinner and Awards Ceremony to follow.

Featuring: Door Prizes Raffle Prizes
Hole Prize Fan Club Prize

Format: Four Person Team Scramble ***Limited to 140 Golfers Only!***

Your Name: _____

Company: _____

Phone: _____ **Fax:** _____

E-Mail: _____

- ☐ Yes! I am interested in signing up for the ASHRAE Spring Golf Tournament.
- ☐ I plan on reserving _____ foursomes
- ☐ *Rush* me complete details on the foursome rates and special sponsorship packages so I can get my reservations in <u>now</u> and "lock-in" my foursomes
- ☐ I would like to be assigned to a team, please rush me an application.
- ☐ Yes! I would like to get _____ ticket(s) to the Awards Ceremony & Feast for my *"Non-Golfing Fan Club"* members.



Mail or Fax to: **Dave Eisenberg,** c/o Air Treatment Corporation
1865 Pleasant Valley Avenue, Oakland, CA 94611
Phone: (510) 655-3990 Fax: (510) 655-7966

Golfinquiry

Meeting Minutes
April 2, 1998

Meeting was called to order at 7:40 pm by Dan Reiter, President.

88 members and guests were present.

The minutes from the March 1998 meeting were approved as printed in the Fog Dispenser.

1. Dan Reiter, President, presented the ballot for Golden Gate Chapter offices as presented in the March Fog Dispenser: Mark Hydeman, Presiden-Elect; Ben Sun, Secretary; Kent Lim, Treasurer; Joe Olivier, 2nd Year Board Member; John Small, 1st Year Board Member. Dan opened the floor for nominations. There was a motion to close nominations 2 nanoseconds later. The nominations were unanimously approved by hand vote.

2. Ernie French, President-Elect and CRC delegate, encouraged all members to submit CRC motions and names for ASHRAE awards and ASHRAE society and CRC positions. Ernie reviewed the awards which include: Honorary Member; Fellow (eg. Carl Jordan); F. Paul Anderson Award; ASHRAE-ALCO Award; Andrew T. Boggs Service Award; Distinguished 50 Year Member; Louise and Bill Holladay Distinguished Fellow Award; and ASHRAE Hall of Fame. Nominations and motions should be given to Ernie French (415-777-5333, frenchnw@pacbell.net) or Mark Hydeman (415-972-5498, <u>mmh0@pge.com</u>). Ernie also recognized Barb Dilts, Nominations Committee Chair, for her work in collecting nominations for ASHRAE awards and background information on the candidates. Go Barb!

3. Ernie announced that the field trip is scheduled for May 14th. The tentative plan is to tour the new wing of the San Francisco Airport. There may be a security problem. The tour (at the Airport or elsewhere) will be announced in the upcoming May Fog Dispenser.

4. Bob Levi, Research Chair, reminded us that it is never to late to donate to research. New tri-fold participants include: Belimo Air Controls (corporate), American Mechanical Service (corporate), Carrier Corporation (corporate) Tempco Equipment Company (corporate, repeat investor). Moved by Bob's pleas, Gail Brager and baby X joined the honor roll ranks on the spot! Bob clarified that repeat investors must reach the honor roll levels twice in a single chapter fiscal year (June to June). Bob can be reached at 510-635-1237 or via email at robert.g.levi@carrier.utc.com.

5. Dennis Thompson, Past President and Regional Research Chair, noted that the Golden Gate Chapter is presently at 43% of its research goals to date. Region X overall is doing well towards its goal, but he encouraged each of us to dig deep for the chapter.

6. Mark Hydeman, Secretary and *Database Whipping Boy*, apologized to Art Zigas and all of the other chapter members who were either omitted from the Roster or listed on pages 61-63. Mark is producing a 1997-1998 Roster Supplement that will be sent out with the upcoming Fog Dispenser. Mark encouraged all members who know dual chapter members to have them get in touch with Mark (<u>mmh0@pge.com</u>, 415-972-5498) to get their information into the database.

7. Mark announced several important changes to the chapter committees: Gary Margadent, TEGA Chair (510-842-3031, <u>gasm@chevron.com</u>); Tom Gilbertson, Auditing Chair (510-376-4516, <u>tomagilbertson@msn.com</u>); and on the spot Robin James volunteered to be the Education Chair (707-745-5998). Mark mistakenly announced Greg Thomas as the Membership chair, Ed DeGuzman (415-594-0182) will be taking that position as well as continuing the Marble game.

8. Mark also announced changes to the chapter website by Robert Marcial, Website Chair. Robert's on-line website tour of the PG&E Pacific Energy Center was recently acknowledged by PG&E's Corporate Communications Department and is presently featured on the home page of the entire corporation.

9. Joe Olivier, 1st Year Board Member and Education Committee Liaison, announced the three Bay Area Science Fair award recipients. Each student received a $100 US Savings Bond, a certificate bearing Dan Reiter's signature, and images of their exhibits will be featured on the chapter website.

10. Joe also announced the Eric Thor Andressen Memorial Scholarship recipient, Robert Marcial. Robert beat out 7 other applicants for the $1000.00 award. The recipient for the Golden Gate Chapter Scholarship will be announced in the Fog Dispenser and the award will be presented at the June chapter meeting.

11. Ed DeGuzman announced the upcoming UC Berkeley Extension Service class in the HVAC/R certificate program, "X471 Refrigeration Concepts". This course will be co-taught by Chuck Monach (510-794-5105, <u>CMonach@aol.com</u>) and Reinhard Seidl (650-631-5988, <u>seidl@flash.net</u>) of ACCO. The course will be held at 150 4th St in San Francisco for 10 Tuesdays 6/23/98-8/25/98 from 7pm to 10pm. Flyers on the course were distributed.

12. Dan announced the upcoming Golf Tournament on behalf of Dave Eisenberg. The tournament will be held at Sunol Valley Golf Club on Friday, June 26th. Sign in is at 11am, shotgun starts at 12:30 pm. Flyers on the tournament were distributed. For more information contact Dave Eisenberg, Golf Chair (510-655-3990).

Respectfully submitted,
Mark Hydeman, Chapter Secretary

ASHRAE Golden Gate Chapter Program Schedule 1997-1998

This schedule will be repeated in each Fog Dispenser (room permitting). If you have questions, comments or suggestions, please contact Ernie French at Norman Wright Equipment Company (415) 777-5333.

Month	Subject	Speaker	Location
May	Field Trip		SFIA
June	Global Warming and other Environmental Impacts of the HVAC Industry		Gabbiano's

The field trip has been confirmed:

It is at the San Francisco International Airport. Meet at the Pacific Energy Center on Howard to catch the bus. See front page for details!

PEOPLE IN NEW PLACES

Richard Nagy has moved!!!

Richard was at Energy Envestment, Inc in Fremont, now he's at DukeSolutions in San Ramon. He may be contacted at 510-327-7300, RLNAGY@DUKE-ENERGY.COM. Or fax him at 510-327-7310.

Was this a result of the ad placed in the Fog Dispenser by DukeSolutions a few months ago???

This is a great avenue to inform the type of people you want for your company. Fifty dollar donation to the Research fund (an inexpensive method of advertising) and great exposure, what more could you ask for?

Contact Debbie Marshall at 510-639-3200, 272 or paco_oak@pacbell.net for more information.

*****People Looking for Work*****

Are you OVERLOADED??

CA/OR licensed ME and EIT assistant looking for contract employment in Northern California. 13 years experience with commercial/industrial HVAC/R systems, including biotech, industrial, healthcare and refrigerated warehouse facilities. Call (GG ASHRAE member) M. David Owen @ (707) 457-3590.

****Companies Looking For People****

Mechanical Design Studio, Inc., (MDS) is seeking HVAC Project Managers, Project Engineers and Plumbing Designers. Candidates shall be currently employed by a consulting firm and be motivated to a change in career which may offer faster professional and financial growth and advancement opportunities than their current position. E-mail resume, professional goals and salary expectations to: dorel@mds-sf.com. All replies will be kept absolutely confidential.

$$

Newcombe Anderson Associates, an innovative San Francisco based energy consulting firm, is seeking mechanical and electrical designers, analysis engineers and construction cost estimators. For more information about our company and employment opportunities, please visit www.newcombanderson.com or fax inquiries to 415/434-2321, attn: recruiting. Full benefits, excellent work environment, equal opportunity employer.



ASHRAE

GALA SPRING GOLF TOURNAMENT



Where: Sunol Valley Golf Club - Sunol, California

When: Friday, June 26, 1998

Time: Sign in @ 11:00 a.m. Shotgun starts @ 12:30 p.m.
Dinner & Awards Ceremony to follow.

Format: Four Person Team Scramble *Limited to 140 Golfers Only!*

Featuring: Door Prizes * Raffle Prizes * Hole Prizes * Fan Club Prize

Your Company Name: ____________________

Your Team Captain Name: ____________________

Team # 1 ____________________
____
____
____

Team # 2 ____________________
____
____
____

Team # 3 ____________________
____
____
____

Team # 4 ____________________
____
____
____

Single Player's name (to be assigned to a team) ____________________

Single players
$ 105.00 each

Sponsorship Packages (circle the sponsorship desired)

1ST *"GOLD"* Sponsor Package

- ✓ Green fees and carts for 4 – foursome teams
- ✓ Two hole sponsorships with your company sign (or we'll make a sign for you)
- ✓ Awards dinner tickets for 4
- ✓ Reserved seating at Awards Dinner
- ✓ Framed photographs of foursomes
- ✓ Gold sponsor special gifts for each player
- ✓ ASHRAE golf accessories

Total Cost per Package $ 1,680.00

2nd *"SILVER"* Sponsorship Package

- ✓ Green fees and carts for 3 – foursome teams
- ✓ One hole sponsorship with your company sign (or we'll make a sign for you)
- ✓ Awards dinner tickets
- ✓ ASHRAE golf accessories

Total Cost per Package $ 1,190.00

Sponsorships will be committed on a first-come first-served basis. The Golf Committee will provide all Company/Team recognition signs or you may provide your own.

3rd *"BRONZE"* Sponsorship Package

- ✓ Green fees and carts for 2 - foursome teams
- ✓ One hole sponsorship
- ✓ Awards dinner tickets
- ✓ ASHRAE golf accessories

Total Cost per Package $ 800.00

4TH *STANDARD* FOURSOME PACKAGE

- ✓ Green fees and carts for 1 - foursome team
- ✓ Awards dinner tickets
- ✓ ASHRAE golf accessories

Total Cost per Package $ 420.00

Award's Celebration Feast:
$20 each (6 for $100)
#______Non-Golfing Fan Club Members are coming!



Please **Make checks payable to: Golden Gate ASHRAE.** Send all fees with your reservation to:
Dave Eisenberg, c/o Air Treatment Corporation, 1865 Pleasant Valley Avenue, Oakland, CA 94611.
Phone: (510) 655-3990
FAX: (510) 655-7966

ashrae-sponsors

ASHRAE Honor Roll

RECEIVED
MAR 26 1998
CONSULTING ENGINEERS

TEMPCO Equipment Company, Inc
100 North Hill Drive, #12 * PO Box 400 * Brisbane, CA 94005 * Phone 415/467-8680 * Fax 415/468-4159

Serving Northern California With A Full Range of HVAC Products

Air Handling Units; *Standard or Customized,* ***Fans****; Centrifugal, Propeller, Axial, Roof Exhaust,* ***Fume Hood Face Velocity Controls, Rooftop Package Units, Fan coils, Air distribution Products****: VAV Boxes, Grilles, Registers and Diffusers, Dampers; Fire, Smoke, Control, Backdraft,* ***Humidification and Dehumidification Products, Vibration and Sound Control, Computer Room Air Conditioning, Make-Up Air Units.***

Local Area Sales Staff

**Chuck Shane, *Eric Tinglog, *Doug Herbert, *Ron Yaffe, *Mark Hardin, *Willie Gee, Andre Shinshiro, *Jay Patel, Henry Chan, Stephanie Sanford, Terri Shelton*

** ASHRAE Members*

Golden Gate Chapter
ASHRAE
41 Sutter Street Suite 401
San Francisco CA 94104-4903

FIRST CLASS MAIL

FOG DISPENSER

Golden Gate Chapter ASHRAE

VOLUME XXXVII - NUMBER 7 **APRIL, 1998**

HAPPY SPRING, HAPPY EASTER

April Meeting, Thursday, April 2nd

Location: Pacific Energy Center
851 Howard St, San Francisco

Social Hour: 5:30 pm downstairs

Pre Dinner Speaker: Don Nurisso 5:45 to 6:15 pm
Black & Veatch
"PrePurchasing Cooling Towers and Chillers as a Package"

Speaker: Charles Salter
Charles Salter and Assoc.
"Mechanical Equipment Noise and Vibration Control"

Dinner: 6:30 pm

Cost: $ 30.00

To Reserve: Please **e-mail** your dinner reservation to Kent Lim by Monday, March 2nd. If e-mail's not available a fax form is included for your convenience.

e-mail:ashrae@essinc.com
Phone: 415/822-1232
Fax: 415/822-6437

Parking is available across the street from the Energy Center next to Chevy's Restaurant.

%%%%%%%%%%%%%%%%%%%%%%%%%%%%

PreDinner Techincal Seminar

Don Nurisso – Black & Veatch Engineers

"PrePurchasing Cooling Towers and Chillers as a Package"

Don will present a method of analyzing the purchase of Cooling Towers and chillers by allowing each vendor to "optimize" their product offering. The analysis provides the client with the total owning and operating cost of this equipment. The analysis includes annual load profile, zero tolerance factory testing, cooling tower power draw vs. heat rejection, pump energy use, energy cost, inflation and net present value. The presentation will last approximately 20 minutes. An additional question/answer/etc. period will follow.

MECHANICAL EQUIPMENT NOISE AND VIBRATION CONTROL

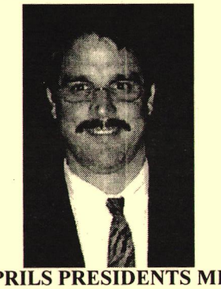
Charles Salter

Charles Salter has been an acoustical engineer for 30 years. His firm, Charles M. Salter Associates probably works on more building acoustics projects than any firm in the United States. Charles is a licensed mechanical engineer in California and Nevada and has degrees in structural engineering, art and design and an MBA. He has taught an acoustics course in the architecture department of UC Berkeley for the last 24 years.

You can learn more about Charles and his firm by visiting their Web site at **www.cmsalter.com**.

The presentation will succinctly cover the folowing issues:

- Space Planning for Noise Control
- Establishing appropriate noise criteria for each use space.
- Noise control measures for fan systems, chillers and cooling towers, fan power boxes, VAV boxes, diffusers and grilles.
- Vibration isolation schemes for mechanical equipment.



APRILS PRESIDENTS MESSAGE

As spring approaches we look forward to outdoor activities. Dave Eisenberg has a great golf tournament lined up. As usual we will also have a tennis tournament in June. Spring also means election of the new board, look for the ballot in this months issue. The Board is also looking to fill chairs positions for next year. We want anyone interested to please contact us. But we are not waiting, we will be tapping shoulders until we fill all the chairs.

What we don't have to look forward to is the Research Promotion Phone – a - Thon. Bob Levi, as Research Chair, stated that members get solicited enough at home. We have had great response from those that donated to Research Promotion but many firms and members still have yet to join those who support this important fund that benefits us all. It is time to write those checks for Research or we might be forced to reinstate the Phone – a – Thon.

As I mentioned last month, CRC is right around the corner, May 7, 8, & 9. Please send Ernie your motions and nominations soon. I hope the key committee chairs for next year make time to attend the workshops. These are an invaluable resource of ideas and very inspiring.

Respectfully Submitted,
Dan Reiter, President

On April 12th don't forget where the eggs are hidden! Better check under the couch or in any little cubby hole.

Fog Dispenser Deadlines

The ninth of the month preceding the meeting. All the news that fits gets printed.

Mail, fax, phone or email News by the 9th of the month preceding the meeting to:

FOG DISPENSER
Debbie Marshall, Editor, PACO Pumps
845 92nd Ave, Oakland, CA 94603
Telephone 510/639-3200. Ext. 232
Fax 510/639-3337
email PACO_OAK@Pacbell.Net

Photojournalism Editor: Mike Scofield

Refer prospective new members to ***Membership Chair:***

John Small----------408/866-0723
FAX----------408/866-5899

For Roster corrections and address changes contact: 1/800/5ASHRAE

GGC database is based on the National Database. You need to contact national in order to change local information. This may take a couple of months.

Published monthly, October through June, by the **Golden Gate Chapter Of the American Society of Heating, Refrigerating and Air-Conditioning Engineers**, c/o Duplicating Associates, 370 Brennan St., San Francisco, CA 94107

1997-1998 OFFICERS

Dan Reiter.....President
Ernie French.....President Elect
Mark Hydeman.....Secretary
Ben Sun.....Treasurer

Board of Governors
Kent Lim, Joe Olivier, Dennis Thompson

ASHRAE GOLDEN GATE CHAPTER 1997-1998 COMMITTEES AND CHAIRPERSONS

Attendance	Dick Charles	Awards	Barbara Dilts	Auditing	Dennis Thompson
BAEC	Tom Reinarts	By-Laws	Roy Gifford	CRC Action	Ernie French
Database Manager	Ginny Gifford	Education/School	Jim Brugger	Fog Dispenser	Debbie Marshall
Golf	Dave Eisenberg	TEGA		Historian	
Honor Roll	Bob Levi	Marble Game	Edgar DeGuzman	Membership/Picnic	John Small
Product Show	N/A this year	PAOE	Dennis Thompson	Program	Ernie French
Publicity	Mike Scofield	Reception	Jean Choi	Refrigeration	Dave West
Research	Bob Levi	Roster	Tim Provo	Web Page	Robert Marcial
Seminar	N/A	Tennis	Rich Leao	1998 Meeting	Tom Reinarts

FAX to:

Dan Reiter
Winzler & Kelly
707-527-8679 (FAX)

ASHRAE Golden Gate Chapter - Ballot for 1998-1999 Officers

Automatic change of positions no vote required:

Position	Name	Company
President	Ernie French	Norman Wright
Past-President	Dan Reiter	Winzler & Kelly

Please cast your vote for the following positions (elections are for a 1-year term):

Position	Name	Company	Yes	No	Write-in Candidate
President-Elect	Mark Hydeman	PG&E			
Secretary	Ben Sun	Flack & Kurtz			
Treasurer	Kent Lim	Kent Lim Associates			
Board of Governors 1-year position	Joe Olivier	ESS Engineering			
Board of Governors 2-year position	John Small	Joseph Schauf			

---------- ---------- ----------
Signature **Print Name** **Date**

Instructions: You must sign and date form. Either Fax this form to Dan Reiter, bring it to the April 2nd Chapter meeting or deliver it no later than April 2nd to:

Dan Reiter
Winzler & Kelly
POB 6798
Santa Rosa CA 95406-0798

EMPLOYMENT OPPORTUNITIES

As stated in the board motions above, all requests for placement of non-ads in the Fog Dispenser will require advance payment of $50.00, unless it is for the purpose of obtaining employment (not employees). If you e-mail an item to me (Debbie Marshall, Fog Dispenser Chair) at paco_oak@pacbell.net, make sure you indicate in your message that you are sending a check to my attention c/o PACO Pumps, 845 92nd Ave, Oakland, CA 94603. If you have any questions, please call me at 510/639-3200, 232 or 272. You may also fax me at 510/639-3337. I try to cut off production at least by the 15th of each month, so try to get all items to me by the 13th.

Leading manufacturer of HVAC Equipment, Building Automation and Temperature Control products is looking for new members to add to our team of professionals. Project Engineering and Technical positions available. Interested in working in a challenging environment with competitive salaries and benefits? Please forward resume and salary expectations to:

Pacific Coast Trane
310 Soquel Way
Sunnyvale, CA 94086
ATTN: BAS Manager

ARA Engineering Group is seeking highly qualified Electrical and Mechanical Engineers as we expand our On-Site Engineering Services.

Position requires a Bachelor of Science in Electrical or Mechanical Engineering, EIT or PE is also required for engineers but not for designers. The candidate must be PC literate and have experience with basic programs such as Windows, Word and Excel. AutoCAD is desirable but not required.

We are currently seeking experience in the following fields:

- Electrical and Mechanical Spec. Writers
- HVAC
- Commercial Buildings
- Public Works
- Inspections

If you have the minimum qualifications and experience ranging between 2 – 15 years, we encourage you to fax us your resume to **(925) 709-0910, Attn: Ali Altaha. Phone is (925) 709-1990**.

MECHANICAL ENGINEER/ PROJECT MANAGER

Winzler & Kelly (W&K) Consulting Engineers is expanding. We are seeking dedicated and motivated individuals for our Santa Rosa office. Our people oriented philosophy is the cornerstone of our success.

Our Santa Rosa office is located in the heart of Sonoma County's wine country, north of San Francisco. Known for its wide variety of outdoor activities and rugged Pacific coast beaches, Sonoma County is one of the most desirable areas to live in both California and the United States. Santa Rosa is the hub of Sonoma County and enjoys fine living without the pressure of a large metropolitan area.

Candidate will have a strong background in design and management of building mechanical systems (HVAC and plumbing). California PE required or the ability to obtain within 12 months. BSME and 10+ years experience. Responsibility for developing and maintaining client relations and managing projects.

Excellent salary benefits and advancement opportunities available. EOE. Resumes to:

Winzler & Kelly
495 Tesconi Circle
Santa Rosa, CA 95401
Fax (707) 527-8679
bonnieburrell@w-and-k.com

$$

PEOPLE ON THE MOVE

Dave Wyllie has relocated from Honeywell to Bentley/Enron Energy Services as a Solution Development Engineer.

Congratulations and Good Luck!!
$$

Make sure you check out the flyers for the golf tournament!!!

ASHRAE Golden Gate Chapter February Meeting Minutes March 5, 1998

Meeting was called to order at 7:30pm by Dan Reiter, President.
78 members and guests were present.
The minutes from the February 1998 meeting were approved as printed in the Fog Dispenser. Ed De Guzman noted a correction for the Fog Dispenser that 60% of the Marble Game proceeds go to the Scholarship fund.

1. **Dan Reiter** noted that we should reinstate the "People on the Move" column in the Fog Dispenser. People who have changed their whereabouts should send that information to Debbie Marshall, Fog Dispenser Chair (510)639-3200 X 232 or via email at paco_oak@pacbell.net.
2. **Dave Eisenberg**, Golf Chair, announced that the tournament will be held on June 26th, 1998 at Sunol Golf Course in Pleasanton. Registration is at 11 am, shotgun start at 12:30. Interested parties should contact Dave at 510/655-3990.
3. **Mark Hydeman** started his announcements with a note of thanks to **Debbie Marshall** for her great work as our new Fog Dispenser Chair. Mark announced the upcoming PG&E Energy Center Programs and reminded the members that although they are free of charge for attendance, the members have already paid for the programs through their utility rates. Mark also announced that survey forms for the upcoming 1998/1999 chapter programs were on each of the tables. He encouraged all to either vote or forfeit their rights to complain about future program content.
4. Mark asked for a show of hands for a proposed CRC motion to allow chapters through the database to update member information for Society. There was strong support for this motion and no opposition.
5. **Ernie French,** president elect and CRC delegate, encouraged all members to submit CRC motions and names for ASHRAE awards and ASHRAE society and CRC positions. Ernie reviewed the awards which include: Honorary Member; Fellow (e.g. Carl Jordan); F. Paul Anderson Award; ASHRAE-ALCO Award; Andrew T. Boggs Service Award; Distinguished 50 Year Member; Louise and Bill Holladay Distinguished Fellow Award; and ASHRAE Hall of Fame. Nominations and motions should be given to Ernie French (415-777-5333, frenchnw@pacbell.net) or Mark Hydeman (415-972-5498, mmh0@pge.com).
6. **John Glover of Winsler and Kelly** provided information about the PECG Initiative. Handouts were provided that included the initiative text, and information from groups in opposition to the initiative. Dan Reiter invited any individual or organization that would like to provide information in support of the initiative to share their views. [Secretary's note: the Board of Directors for the Golden Gate Chapter of ASHRAE voted to provide information on the initiative as it clearly impacts our industry. The Board does not have an official position on this initiative, nor are they in a position to do so. The board recommended that the coalition seeking our sponsorship take their case to the regional TEGA committee as this is a statewide initiative.]
7. **Bob Levi**, research chair, announced that the new tri-fold honor roll announcements included a new category for repeat investors in research. This elite group includes **Max Sherman, Ed Arens, Dick Charles, and Dennis Thompson**. **Rob Hogue** (individual) **and Air Treatment Corporation** (corporate) joined the honor roll this month. Bob announced that there would be no phone-a-thon this year, but encouraged members to contact him for the phone-a-friend campaign. Bob can be reached at 510/635-1237 or via email at robert.f.levi@carrier.utc.com.
8. Dan Reiter recognized **Grant Wong** and **Gayner Engineers'** generous contribution of $50,000 for the **Dwane Hanson Scholarship** at Society. Grant spoke briefly to encourage other members and companies to consider this as seed money for the development of future engineers.
9. 100% of the Marble Game Proceeds go to the **Edgar DeGuzman Vacation Fund** (just checking to see if you're still awake).

Respectfully submitted,
Mark Hydeman, Chapter Secretary.

BOARD MOTIONS

1. Motion to purchase a domain for the chapter website (www.gg_ashrae.org). This has a cost of $100 for the first two years and $50/year thereafter. Motion passed by a vote of 6 FOR, 0 AGAINST, and 0 ABSTAIN.
2. Motion to purchase service on an ISP with a budget of $50 startup and $20/month. Motion passed by a vote of 4 FOR, 0 AGAINST, and 1 ABSTAIN.
3. Motion that all applicants for scholarships get a free 1 year student membership. Motion passed by a vote of 5 FOR, 1 AGAINST, and 0 ABSTAIN.
4. Motion that the policy for Fog Non-Ads will be as follows: ads for individuals seeking employment are free. Ads of employers looking for employees are $50.00 each time they are run. The check must be in the Fog Dispenser Chair's hand for the ad to be printed. Motion passed by a vote of 6 FOR, 0 AGAINST, and 0 ABSTAIN.
5. Motion that the chapter will proceed to find an electronic publisher and mail house for next year (1998/1999), and to encourage members to utilize the website for access to the Fog Dispenser. Motion passed by a vote of 6 FOR, 0 AGAINST, and 0 ABSTAIN.

ASHRAE GOLDEN GATE CHAPTER PROGRAM SCHEDULE 1997-1998

This schedule will be repeated in each Fog Dispenser (room permitting). If you have questions, comments or suggestions, please contact **Ernie French** at Norman Wright Equipment Company (415) 777-5333.

Month	Subject	Speaker	Location
April	Mech. Equip. Noise and Vib. Control	Charles Salter, Charles M. Salter & Assoc	PG&E Energy Center
May	Field Trip	SFIA Maint. Staff	SFIA, Central Plant and HVAC tour
June	Environmentally Friendly HVAC Design Spouse Night Past President's Night	Peter Simmons Flack & Kurtz	Gabbiano's

Database Chair

The Golden Gate Chapter of ASHRAE desperately needs a new database chair. **This is a critical part of our chapter's operations and the Board would greatly appreciate your help.** The qualified candidate ideally has prior experience either working with or developing database applications. Experience with MS Access is a huge plus.

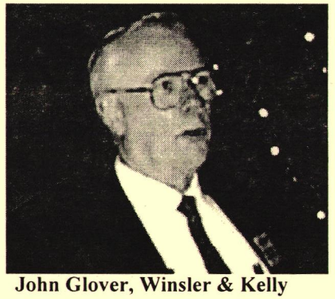
Responsibilities include:

- Run a query to produce a table of label addresses for Fog Dispenser (each month)
- Run a query to produce a table of contact information for the Roster (once a year)
- Maintain monthly updates from ASHRAE (downloaded from an FTP site)
- Maintain a separate database of dual-chapter members, electronic members and address corrections (MS Access)

Please note that you do not need to be experienced in all of the applications noted above. We can train the new chair in any unfamiliar application. The key is to have a basic understanding of how databases work (structure) and the principles of preserving data integrity (not mistakenly overwriting critical data).

This should take approximately 4 hrs/month. We are looking for a commitment of 2 years. No salary, but unlimited gratitude and other benefits apply.

Golden Gate Chapter of ASHRAE
Contact: Mark Hydeman
Phone: 415/972-5498
EMail: mmh0@pge.com



John Glover, Winsler & Kelly



ASHRAE RESEARCH

****

As announced at the March meeting, there will not be a phone a thon this year, but we still need your investments. We are requesting volunteers to contact five people that you know to solicit investments in ASHRAE Research. Please contact Bob Levi if you can volunteer 30 minutes to make a few phone calls at your own schedule.

Thanks to Rob Hogue, the November Marble Draw winner, for sharing his proceeds at the Honor Roll level.

Please make your check payable to ASHRAE Research and mail to:

Robert Levi
Carrier Corporation
P. O. Box 23130
Oakland, CA 94623
510/635-1237

If you would rather charge your donation to a credit card, please pick up one of the donation envelopes at the registration desk during the April meeting or call Bob Levi to request one.

****

UPCOMING PROGRAMS AT THE PG&E PACIFIC ENERGY CENTER

For more information on these programs or to register call (415) 973-7268 or on-line at < http://www.pge.com/pec/progtoc/progmenu.html >. All of these seminars listed are free.
The seminars are located at the PG&E Energy Center @ 851 Howard Street between 4th and 5th streets in San Francisco

CoolTools™: A Chilled Water Plant Optimization Toolkit
April 21: 10:00 am - 4:30 pm

This seminar features the CoolTools project, an integrated set of tools for design and operation of chilled water plants. The CoolTools products are software programs, publications and support services that together provide an objective analytical method for comparing alternatives during the design and operation of chilled water systems. CoolTools supports a new standard of practice for achieving cost effective and efficient equipment selection, system design and operating scenarios. CoolTools products are Internet based, public domain resources, and are targeted to building owners, design professionals, and operators involved in both new construction and retrofits.
The seminar will include case studies which highlight the application of recommended evaluation techniques, an assessment of investment risk reduction from applying these techniques, software demonstrations and a presentation of a project planning and implementation guide. Copies of the software and the implementation guides will be distributed at this seminar.

Data Collection for Packaged HVAC Units
May 6: 9:00 am - 4:30 pm

This hands-on workshop will feature measurement and evaluation techniques to assess the operation of packaged rooftop equipment in the field. Many of these techniques apply to built-up air handling units and refrigeration systems as well. Topics include: field planning; instrumentation; field techniques; evaluation of air-side economizer performance; and determination of compressor staging and cycling. Data will be presented that compares field performance of packaged equipment to ARI certified ratings.

Calibrated Model Forum
May 13: 10:00 am - 4:30 pm

Experts from the field will present a range of techniques to calibrate simulation models of buildings using utility data, surveys and field measurements. This program will feature an open forum on the value and application of calibrated models to building performance analysis. The panel includes: Jeff Haberl of Texas A&M, Robert Sonderegger of SRC Systems and Rob Pratt of Battelle, Pacific Northwest Laboratories.

Mark Your Calendars for These Upcoming Programs:

June 2 **CoolTools™: Tools and Techniques for In-Situ Evaluation of Chilled Water Plants**
June 11 **Internet Applied: HVAC Resources in Cyberspace**

++

Edgar DeGuzman has announced that the Scholarship Fund Game has a current jackpot of $450.00 for the April meeting. The "Marble Game" may be seeing a facelift with a new name indicating where the majority of the funds are intended. This is a great investment to help out students trying to get into the engineering fields. Again, all funds obtained by purchasing tickets at the monthly meetings are divided into two categories: 60% goes to the Scholarship Fund and 40% are put into winnings.

I apologize Edgar, for all mistakes made in previous issues of the Fog Dispenser relating to this.

D. Marshall

++

ASHRAE GOLDEN GATE CHAPTER
DINNER RESERVATION FAX

For THURSDAY, March 5, 1998
Please send Fax by noon on Monday, March 2, 1998

FAX TO: **Kent Lim, Kent Lim & Company, Inc.**
FAX: **(415) 822-6437**
Phone: **(415) 822-1232**
e-mail: **ashrae@essinc.com**

Please call if you have any last minute changes in plans.
Please cancel your reservation if you cannot attend the meeting.
Preferred method of communication!

FROM: DICK CHARLES

COMPANY: C&B ENGINEERS Phone: 415 442 0110

Please make 3 reservation(s) for the following people (fill in names below):

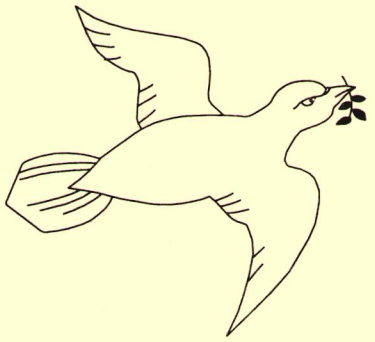
DICK CHARLES

JEFFREY DITTMAN

TIM CASADOS

LOCATION: Gabbiano's (upstairs) 1 Ferry Plaza, San Francisco, CA (415) 391-8403

Gabbiano's is located near Pier 2, behind the Ferry Building (Clock Tower), one block from the Embarcadero BART station. Limited parking is available along the Embarcadero. Valet parking is also available.



(Don't destroy our natural resources, use e-mail!)

Don't forget!!!

Use the Golden Gate ASHRAE web site (remember it's case sensitive!)!

www.connet.com: GGashrae

Golden Gate Chapter
ASHRAE
41 Sutter Street Suite 401
San Francisco CA 94104-4903

FIRST CLASS MAIL



RICHARD A CHARLES
C & B CONSULTING ENGINEERS
150 SPEAR ST STE 500
SAN FRANCISCO, CA 94105-1537

RECEIVED
FEB 25 1998
CB CONSULTING ENGINEERS

ASHRAE Honor Roll

Air Treatment Corporation
HVAC Manufacturers Representative
Variable speed drives & motors

David Eisenberg Dan Noone Charlene Sturm
1865 Pleasant Valley Avenue Oakland, CA 94611
Phone: 510.655.3990 Fax: 510.655.7966
Email: atcoakland@earthlink.net

San Francisco
Sacramento
Los Angeles
San Diego

Mark Your Calendar!
ASHRAE
Golf Tournament
June 26, 1998

FOG DISPENSER

Golden Gate Chapter ASHRAE

VOLUME XXXVII - NUMBER 6 **MARCH, 1998**

Thursday, March 5, 1998

HAPPY ST. PATRICK'S DAY

Location: Gabbiano's (upstairs)
1 Ferry Plaza, San Francisco, CA

Social Hour: 5:30 pm downstairs

Speaker: Peter Hmelyer
Phoenix Controls Inc.
"Unique Requirements and Benefits of VAV Lab Systems"

Dinner: 6:30 pm

Cost: $ 30.00

To Reserve: Please **e-mail** your dinner reservation to Kent Lim by Monday, March 2nd. If e-mail's not available a fax form is included for your convenience.

e-mail: **ashrae@essinc.com**
Phone: 415/822-1232
Fax: 415/822-6437

Gabbiano's is located near Pier 2, behind the Ferry Building (Clock Tower), one block from the Embarcadero BART station.

Don't forget!!!

Use the Golden Gate ASHRAE web site (remember it's case sensitive!)!

www.connet.com/GGashrae

UNIQUE REQUIREMENTS AND BENEFITS OF VAV LAB SYSTEMS

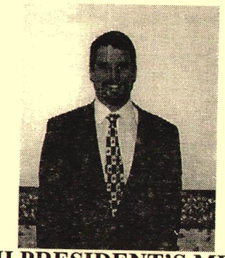
HVAC design for research laboratories has unique requirements that significantly exceed those of the typical commercial building. In addition to satisfying the Heating/Cooling requirements for thermal loads, HVAC systems must accommodate fume hoods that capture and contain hazardous substances, provide positive or negative lab pressurization, and meet minimum ventilation requirements. Designing these laboratories as Variable volume Systems adds increasing complexity.

Peter will be discussing these unique requirements and exploring the opportunities for energy savings and diversity in designing these HVAC systems.

Peter Hmelyer, is the Director of North American Sales for Phoenix Controls Corporation, and is responsible for all the sales activities throughout the United States and Canada.

Peter joined Phoenix Controls in January 1991 as the Midwest Regional Manager and was responsible for a 12 state area in the central United States. He also has held the positions of Central Regional Manager and Regional Sales Director at Phoenix Controls. Throughout his career Peter's main responsibilities included assisting the local Phoenix sales representatives in the sales, engineering and overall customer support of the Laboratory Airflow Control Systems manufactured by Phoenix Controls, as well as managing the Phoenix Regional and District Sales Managers. He has been involved in over 300 Laboratory Control System projects.

Prior to joining Phoenix Controls, Peter worked in the Building Automation and Controls industry for eleven years. He is a graduate of the University of Akron with a Bachelors Degree in Mechanical Engineering.



MARCH PRESIDENT'S MESSAGE

What a great Winter Meeting! Great job host committee! We all deserve a collective hand.

I would like to recognize the Host committee because of all their extra efforts: Jim Nemechek fantastic job on entertainment, Tom and Juanita Gilbertson put together great tours, John Small handled the information team very well, Robin James exemplary job for hospitality, Frank Mayhew and Mike Scofield diligently administered the session monitors, and Carl Jordan kept the money in the right hands. Tom Reinarts was the incredible leader of this Host Committee with the help and wisdom of Dick Charles. Lastly let us not forget it was Tom White who gave us this wonderful opportunity to have this Winter Meeting by lobbying for it many years ago to be in San Francisco in 1998.

CRC is coming up in a few months. Now is the time for us to prepare. If you have thoughts on motions or members to nominate for regional or society positions please contact Ernie French. He will be our delegate. For award nominations contact Barbara Dilts. This is your chance to speak up!

You will see a notice in this issue regarding Prop 244. Read it! It will effect all of us in some way. Get informed!

I know the weather held some folks back last month. I hope to see you at this month's meeting.

Respectfully Submitted,
Dan Reiter, President

Fog Dispenser Deadlines
The ninth of the month preceding the meeting. All the news that fits gets printed.

Mail, fax, phone or email News by the 9th of the month preceding the meeting to:
FOG DISPENSER
Debbie Marshall, Editor, PACO Pumps
845 92nd Ave, Oakland, CA 94603
Telephone 510/639-3200. Ext. 232
Fax 510/639-3337
email PACO_OAK@Pacbell.Net

Photojournalism Editor: Mike Scofield

Refer prospective new members to
Membership Chair:

John Small----------408/866-0723
FAX----------408/866-5899

For Roster corrections and address changes contact:
1/800/5ASHRAE

GGC database is based on the National Database. You need to contact national in order to change local information. This may take a couple of months.

Published monthly, October through June, by the **Golden Gate Chapter Of the American Society of Heating, Refrigerating and Air-Conditioning Engineers**, c/o Duplicating Associates, 370 Brennan St., San Francisco, CA 94107

1997-1998 OFFICERS
Dan Reiter.....President
Ernie French.....President Elect
Mark Hydeman.....Secretary
Ben Sun.....Treasurer
Board of Governors
Kent Lim, Joe Olivier, Dennis Thompson

ASHRAE GOLDEN GATE CHAPTER 1997-1998 COMMITTEES AND CHAIRPERSONS

Attendance	Dick Charles	Awards	Barbara Dilts	Auditing	Dennis Thompson
BAEC	Tom Reinarts	By-Laws	Roy Gifford	CRC Action	Ernie French
Database Manager	Ginny Gifford	Education/School	Jim Brugger	Fog Dispenser	Debbie Marshall
Golf	Dave Eisenberg	TEGA		Historian	
Honor Roll	Ellen Pierce	Marble Game	Edgar DeGuzman	Membership/Picnic	John Small
Product Show	N/A this year	PAOE	Dennis Thompson	Program	Ernie French
Publicity	Mike Scofield	Reception	(open)	Refrigeration	Dave West
Research	Bob Levi	Roster	Tim Provo	Web Page	Robert Marcial
Seminar	N/A	Tennis	Rich Leao	1998 Meeting	Tom Reinarts

Prop 224 – The Competition Killer Will Not Help Taxpayers

You should be aware that there is an initiative on the June 2 ballot that, if passed, may have a significant impact on the ASHRAE membership. Deceptively termed "The Government Cost Savings and Taxpayer Protection Amendment," Proposition 224 would neither save nor protect.

In the way of background, there is a public employees union, Professional Engineers in California Government (PECG), that through mandatory dues assessments, raised and spent over $2.0 million to buy signatures to qualify the initiative. The initiative, which would amend the California Constitution, applies to any project where the state provides any funding or where state regulation or review is involved. These projects would be subject to a state favored "competitive bidding" process conducted by the State Controller's office.

The initiative applies to all contracts for engineering, architectural, landscape architectural, surveying, environmental, or engineering geology services awarded by the state of California or by any state agency to any public or private entity, or by any local public entity. "State agency" means every state office, officer, agency, department, division, bureau, board, and commission excluding only the University of California, the California State University and Colleges. In the initiative, "local public entity" means any city, county, city and county, including a chartered city or county, public or municipal corporation, school district, special district, authority, or other public entity formed for the local performance of governmental and proprietary functions within limited boundaries.

Prior to the award of any contract covered by the initiative, the State Controller must prepare and verify an analysis of the cost of performing the work using state civil service employees and the cost of using private firms. In comparing costs, the cost of performing the work using state civil service employees shall include only the additional direct costs to the state, that is, no overhead costs are to be considered. Costs of the private firms must include all anticipated contract costs and all costs to be incurred by the state, state agencies, and the contracting entity for the bidding, evaluation, and contract award process and for inspecting, supervising, verifying, monitoring, and overseeing the contract. With this type of analysis, the use of state civil service employees will always appear to cost less.

Projects that are now conceived and developed locally by cities, counties, school districts, and other special districts would be sent to Sacramento for management and administration. This will affect most engineers, surveyors, architects and planners in private practice, and would directly affect over 10,000 jobs in the engineering sector and, because of the long delays in getting projects on the street, more than 100,000 jobs in the construction sector.

The Howard Jarvis Taxpayers' Association, American Institute of Architects, California Council, California Association of Sheet Metal & Air Conditioning Contractors National Association, California Chamber of Commerce, Mechanical Engineers Association of California, State Building and Construction Trades Council of California (AFL-CIO), the California PTA and hundreds of additional major statewide organizations publicly oppose the initiative because they see how adversely the initiative will affect their constituents.

To learn more about how the Competition Killer may affect you or your business, visit the campaign against Prop 224 web site at www.fedup.org.

Chapters Regional Conference to be held May 5th -9th!!!

The CRC or Chapters Regional Conference will be hosted by the Orange Empire chapter at the Pacific Hotel Disneyland on May 5th through May 9th. This Region X CRC is where the ASHRAE chapters of California, Nevada, Arizona and Hawaii conduct their Regional and Society business and bring their suggestions on how to improve ASHRAE. Your Delegate and Alternate for this 1998 CRC is Ernie French and Mark Hydeman.

The agenda for the 1998 Region X CRC is as follows:

*** Tuesday May 5th ASHRAE/SMACNA golf tournament**
*** Thursday May 7th 8am-4pm the technical session**
*** Thursday May 7th, 4pm through Saturday May 9th, 5pm Regional business and committee workshops**

All ASHRAE members are invited and encouraged to participate in the CRC and to bring their families. If you are interested in attending and need an application or more information contact Carol Jensen at (714) 434-1982. For background information on the CRC contact either Ernie French (415-777-5333, **frenchnw@pacbell.net**) or Mark Hydeman (415-972-5498, **mmh0@pge.com**).

Regional and Society business include the nominations of persons for recognition and awards including ASHRAE Fellows, Regional Award of Merit, and Society Distinguished service awards. Information and guidelines for the ASHRAE awards can be found on the ASHRAE website **<www.ashrae.org>** under "CHAPTER SUPPORT" in the "MEMBERS ONLY" section of the website. In addition, CRC is where the Regional Vice Chairs and Regional Director are nominated. It is also the place where motions are made to change of Region or Society operations.

If you have motions, names of people for awards or nominations for regional officers get them to Ernie French or Mark Hydeman as soon as possible.

News from the Redwood Empire Section:

Next meeting Wednesday, March 4th:

Social Hour:	5:30 pm
Dinner:	6:30 pm
Location:	Jonesy's Famous Steak House Napa County Airport 2044 Airport Road Napa, CA
Menu:	Sirloin steak, dinner salad, baked potato, vegetable, roll and coffee
Cost:	$25.00

Reservations required

Subject:	Air Distribution Selection/Overview
Speaker:	Dan Int-Hout III Manager, Research, TITUS, Richardson Tx

June 3rd Panel to Discuss "Design Build" vs. "Plan and Spec" Construction

The Redwood Empire ASHRAE Section will host members of the Redwood Empire Architects Institute of America for joint dinner meeting set for June 3rd at the Adobe Creek Golf Club in Petaluma. The Blue Ribbon panel addressing this controversial topic consists of Ken Coker, AIA of Coker Architects in Santa Rosa, Carl H. Jordan, PE, Consulting Mechanical Engineer in Berkeley, Bob Linford, PhD, PE of Linford Company in Oakland and Gerald Weisback, Fellow AIA, of Long & Levit, Attorneys at Law in San Francisco. The dinner cost is $25.00 and a cash bar will open the social hour at 5:30 pm with dinner scheduled for 6:30pm. The program will begin at 7:30pm. Advanced reservations are encouraged by faxing Mike Scofield at 707/829-3142.

Officers and Board of Governors Named for Redwood Empire ASHRAE

The Nominating Committee, chaired by Tony Costa, has presented the following list of candidates to serve as officers and Board of Governors for the Redwood Empire Section of the Golden Gate Chapter of ASHRAE. Nominations from the floor will be accepted at the March 4, 1998 Chapter Meeting in Napa. Ballots will be mailed with the May Grapevine Newsletter with the election results to be announced at the June 3rd meeting in Petaluma.

President	**Phil Russo**
Vice President	**Pat Bailey**
Secretary	**Larry Nelson**
Treasurer	**Paul Irwin**
Board of Governors	**Todd Williams**
	Dave Hofer
	Jim Horn

Paul Hanzel of Westates Pacific Dies

On Monday night, February 2, 1998, a mud slide triggered by the heavy storms and winds destroyed the home of Cindi and Paul Hanzel, killing Paul. Paul was President of Westates Pacific company, Inc in Los Altos, California and a past president of the San Jose ASHRAE Chapter. A memorial service for Paul was scheduled for Thursday, February 12, 1998, at Trinity Church in Sunnyvale, California. A Paul Hanzel Trust Fund for the benefit of Cindi Hanzel has been set up by Westates Pacific Company, 199 First Street, Los Altos, CA 94022 (Phone 650/948-9694).

ASHRAE Golden Gate Chapter February Meeting Minutes February 5, 1998

Meeting was called to order at 7:15 pm by Dan Reiter, President.

40 members and guests were present

The minutes from the January 1998 meeting were approved as printed in the Fog Dispenser. Edgar DeGuzman noted a correction for the Fog Dispenser that 100% of the Marble Game proceeds go to the Scholarship fund.

1. Dave Eisenberg, Golf Chair, announced that the tournament will be held on June 26th, 1998. Interested parties should contact Dave at 415/655-3990.
2. Dan noted that the society Winter meeting went very well due to the diligent work of the host committee and all of their volunteers. Dan recognized the hard work of Tom Reinarts, Chair; Dick Charles, Co-Chair; Carl Jordan, Budget; Jim Nemechek, Entertainment; Tom and Juanita Gilbertson, Tours; John and Thermage Small, Information and Publicity; Robin James, Hospitality against tough logistics with the weather; Frank Mayhew and Mike Scofield, Volunteers. Dan noted that with the incredible participation by volunteers there was no lack of coverage for meeting events. Dan noted that Tom White, the honorary chair, received much deserved recognition by society at the president's luncheon.
3. Dan announced the new honor roll participants on behalf of Bob Levi, Research Chair; Mike Scofield joined as an individual sponsor; Glumac International and Phoenix Controls joined as corporate sponsors.
4. Dan announced that Paul Hanzel of Westates Pacific was killed by a falling tree in a recent storm. The entire group remembered him with a moment of silence.
5. Dan announced that scholarships are available and encouraged all members to encourage students to submit applications. There are two scholarships, both at $1,000. There is a short application and essay.
6. The Region X CRC, hosted by the Orange Empire Chapter of ASHRAE, will be held in Anaheim on May 7th, 8th and 9th. Ernie French is our delegate, Mark Hydeman is our alternate. Members can use the CRC as an opportunity to either present motions for changes in society operation or to nominate members for society awards and society positions. Members with motions or nominations should contact either Ernie or Mark.
7. The Nominating Committee has met and nominated John Small as the new incoming board member. Dan reminded the membership that an official ballot will be in the next Fog Dispenser, and the nomination process is open until the March meeting. None the less, he asked everyone to congratulate John on his selection by the Nominating Committee. The Nominating Committee ballot will be as follows: Mark Hydeman, President Elect; Ben Sun, Secretary; Kent Lim, Treasurer; Joe Olivier, Second Year Board Member, and John Small, First Year Board Member.
8. Engineer's week is coming up in March. Anyone interested in participating should contact Jim Brugger, our Education Committee Chair. Jim can be reached at 415/677-0141.
9. Ed DeGuzman, Marble Chair, announced that contrary to the information in the January Fog Dispenser, 10% of the Marble Game proceeds goes to the scholarship program.

Respectfully submitted,
Mark Hydeman, Secretary

Board Motions

Motion to approve purchase of $3,000 in US Treasuries for the Eric Thor Andressen Memorial Scholarship Fund. - Motion passed, 5 For, 0 Against, 0 Abstain

Motion to approve the Fog Dispenser Honor Roll rules as proposed by Bob Levi in a January 14th EMail. - Motion passed, 4 For, 1 Against, 0 Abstain

Note: The gist of the proposal by Bob Levi is to use the Fog Dispenser Honor Roll to recognize contributions by individuals and companies above the normal Honor Roll levels. The proposed levels are as follows: large engineering firm $500.00; small engineering firm $200.00; and, contractor or vendor $500.00. Bob also proposed three issues per year for each category. To participate a firm or individual must have their money in to Bob by the chapter meeting prior to the target Fog Dispenser. The winning entry will be chosen by lottery. All entries will be noted in the Fog Dispenser. Runners-up can be considered for a subsequent Honor Roll lottery in the same chapter year by contributing an additional $100 per renewal.

Move that an informative announcement on the PECG be posted in the Fog Dispenser and on the website through June. Include that a 5 minute announcement be made by Jack Goble at the March chapter meeting: Motion passed, 4 For 0 Against 0 Abstain.

ASHRAE GOLDEN GATE CHAPTER PROGRAM SCHEDULE 1997-1998

This schedule will be repeated in each Fog Dispenser (room permitting). If you have questions, comments or suggestions, please contact Ernie French at Norman Wright Equipment Company (415) 777-5333.

Month	Subject	Speaker	Location
March	Diversity and Energy Savings in VAV Lab Design	Pete Hmelyer - Phoenix Controls	Gabbiano's
April	Utility Deregulation		PG&E Energy Center
May	Field Trip		
June	Global Warming and other Environmental Impacts of the HVAC Industry		Gabbiano's

ASHRAE RESEARCH

How often do you use an ASHRAE Handbook, CD, or Pocket Guide? Each time you use one of these respected resources remember that the much of the new material comes to you from Research funded by ASHRAE. Please invest in ASHRAE Research to continue this quality of information.

Thanks to the following new Corporate Honor Roll participant:

Air Treatment Corporation

Thank you to the following Individual Honor Roll participants who have invested again at the Honor Roll level:

Edward Arens
Dick Charles
Max Sherman
Dennis Thompson

Please make your check payable to ASHRAE Research and mail to:

Robert Levi
Carrier Corporation
P. O. Box 23130
Oakland, CA 94623
510/635-1237

If you would rather charge your donation to a credit card, please pick up one of the donation envelopes at the registration desk during the March meeting or call Bob Levi to request one.

UPCOMING PROGRAMS AT THE PG&E PACIFIC ENERGY CENTER

For more information on these programs or to register call (415) 973-7268 or on-line at < http://www.pge.com/pec/progtoc/progmenu.html >. All of these seminars listed are free.
The seminars are located at the PG&E Energy Center @ 851 Howard Street between 4th and 5th streets in San Francisco

Data Collection for Pumps and Fans
March 16th & 17th (2 days): 9:00 am - 4:30 pm each day

This hands-on workshop will cover all of the information required to perform field assessment of pumps and fans for energy conserving retrofits. Topics include: pump and fan fundamentals; site surveys; project screening techniques; development of load cycles from field data; analysis of baseline performance and design alternatives; and field measurement equipment and techniques.

Gas Cooling and Dehumidification for Labs and Fabs
March 24th: 10:00 am - 4:30 pm

This program will cover the applications of gas- and thermally-fired chillers and desiccant dehumidification. The program will focus on three classes of equipment: gas-engine chillers, direct- and indirect fired absorption; and desiccant dehumidification. Each section will have a presentation on the technology by an industry expert and a case study by either a facility manager or engineer. The case studies will focus on applications in commercial process; industrial process and laboratory environments.

Mark Your Calendars for These Upcoming Programs:

April 21	***CoolTools™: A Chilled Water Plant Optimization Toolkit***
May 6	***Data Collection for Packaged HVAC Units***
May 13	***Calibrated Model Forum***
June 2	***CoolTools™: Tools and Techniques for In-Situ Evaluation of Chilled Water Plants***
June 11	***Internet Applied: HVAC Resources in Cyberspace***

ππππππππππππππππππππππππππππππππππππππ

*****Email addresses to remember:*****

Fog Dispenser: paco_oak@pacbell.net
Roberto Marcial: rmarcial@uclink4.berkeley.edu
Website chair
GGASHRAE: <www.connet.com/GGashrae>

EMPLOYMENT "OPPORTUNITIES"

Energy Engineer

Supersymmetry is a "green" enginnering firm, specializing in energy efficiency for the high tech industry. We are seeking a full-time, junior engineer to work on energy monitoring, HVAC design, and energy efficiency projects for high tech companies in Silicon Valley. An engineering degree is required and experience with energy efficiency is highly desirable. Must be eager to work in a small, informal office with other dedicated an environmentally minded engineers.
Supersymmetry USA, Inc.
Contact: Peter Rumsey, Director
Phn: 510/654-0524
Fax: 510/654-0599
5201 Harbord Drive, Oakland, CA 94618

****

Mechanical Engineer

Experienced in HVAC and Plumbing design, project management. PE preferred. Established consulting office in Sebastopol (Sonoma County), with benefits. Projects include wineries, industrial, commercial and schools. Resume and salary requirements to: **Larkin & Associates, Inc., PO Box 2339, Sebastopol, CA 95472. Fax: 707/823-9363.**

Affiliated Engineers is seeking an HVAC Department Head candidate to lead a team of engineers, designers and technicians. Position entails project assignments, scheduling, workload projections, budgeting, QA/QC, technical guidance and coaching of employees. Excellent management and personnel skills, 10+ years experience required. Diverse projects, competitive compensation.
Please send letter and resume in confidence to:
Operations Manager, 2700 Ygnacio Valley Rd., Ste 170, Walnut Creek, CA 94598. EOE
****

The Fog Dispenser will gladly print any advertisement for employment (whether you want to hire someone or you want to be hired). We ask that a $50.00 contribution be made to the research fund for each ad. Please contact Debbie Marshall for further details. You may contact Debbie at (510) 639-3200, ext. 232 or 272, or email at <paco_oak@pacbell.net>

DukeSolutions℠
A Duke Energy Company

DukeSolutions is a Duke energy company. Our reputation for leading-edge technology and innovation is unmatched in the energy service industry, and our amassed resources make us the largest natural gas and electric energy company in the world. We provide commercial, industrial, institutional and governmental entities nationwide with fully integrated energy programs and services.

DukeSolutions is a new business venture with an entrepreneurial atmosphere, focused on project development. Now is the time to join our Western Region team. We have the following openings in our San Ramon or Orange, CA locations:

- **Senior Construction Engineer** (7+ years of experience)

Position requires BS in a relevant discipline with experience in construction and project management of HVAC, electrical, and industrial project; performance contracting experience a plus.

- **Project Managers** (5+ years of experience required and PE desired)
- **Project Engineers** (2+ years of experience required)

Positions requires BSME with experience in identifying, analyzing, and implementing energy efficiency upgrades in large industrial and commercial facilities. HVAC design, DOE2 modeling, or large refrigeration system experience a plus.

Interested candidates, please forward your resume to:
Innovative Search Group, Inc., Attn: T. Evert, re: DukeSolutions, 8097 Roswell Rd., Ste. C-101, Atlanta, GA 30350, email: tevert@innovativesearch.com.
Excellent growth potential, competitive compensation. We are an Equal Opportunity Employer.

++

Engineer: ME with 2-7 years experience. Position involves review, analysis, and writing of technology assessments, interpreting R&D results, developing user guidelines, and other technology transfer in HVAC/lighting/electric and gas commercial-sector technologies. Requires broad view of the industry. Send resume and copy of recent writing sample to Ms. Saunders, BKI, 501 14th St., Suite 200, Oakland, CA 94612.
> Donald J. Aumann
> Senior Consultant
> BKI
> 501 14th St., Suite 200
> Oakland, CA 94612
> ph 510-444-8707 fax 510-444-2072
> daumann@bki.com www.bki.com

ASHRAE GOLDEN GATE CHAPTER
DINNER RESERVATION FAX

For THURSDAY, February 5, 1998
Please send Fax by noon on Monday, February 2, 1998

FAX TO: **Kent Lim, Kent Lim & Company, Inc.**
FAX: **(415) 822-6437** Please call if you have any last minute changes in plans.
Phone: **(415) 822-1232** *Please cancel your reservation if you cannot attend the meeting.*
e-mail: **ashrae@essinc.com** ***Preferred method of communication!***

FROM: _____

COMPANY: _____ Phone: _____

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

_____ _____

_____ _____

_____ _____

LOCATION: Gabbiano's (upstairs) 1 Ferry Plaza, San Francisco, CA (415) 391-8403

Gabbiano's is located near Pier 2, behind the Ferry Building (Clock Tower), one block from the Embarcadero BART station. Limited parking is available along the Embarcadero. Valet parking is also available.



(Don't destroy our natural resources, use e-mail!)

Don't forget!!!

Use the Golden Gate ASHRAE web site (remember it's case sensitive!)!
http://www.connet.com:8080/GGashrae/

ASHRAE Golden Gate Chapter Program Schedule
1997-1998

This schedule will be repeated in each Fog Dispenser (room permitting). If you have questions, comments or suggestions, please contact Ernie French at Norman Wright Equipment Company (415) 777-5333.

Month	Subject	Speaker	Location
February	Variable Speed Pumping and Energy Efficient Hydronic Systems	Ken Luther ITT Fluid Handling	Gabbiano's
March	Diversity and Energy Savings in VAV Lab Design	Pete Hmelyer - Phoenix Controls	Gabbiano's
April	Utility Deregulation		PG&E Energy Center
May	Field Trip		??
June	Global Warming and other Environmental Impacts of the HVAC Industry		Gabbiano's



Did You Know??

Did you know the difference between piping and tubing? Pipe is generally used for pipelines and has dimensions formerly designated as IPS (iron pipe size). Pipe can be steel, occasionally brass or copper, or other materials. Tubing can be copper types K, L, or M; or other applications such as in boilers, vehicles, instrumentation, etc. Tubing can be specified in nominal pipe sizes or O.D. (common with refrigeration).

Thank you Carl Jordan.

If any of you would like to contribute informational items to the group through the Fog Dispenser please fax them to Debbie Marshall @ (510) 639-3337, mail to PACO Pumps, 845 92nd Ave, Oakland, CA 94603 or email http://www.paco_oak@pacbell.net. If there is room to print I'll try to get it in.

❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄

The marble game is off and running but Edgar really needs your help. Don't forget to purchase your tickets, Edgar's not going to let you forget anyway!



All proceeds go to the research fund!!

❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄❄

Speaking of ASHRAE RESEARCH.....

The greatest HVAC Exposition in the world just finished in San Francisco. Without a doubt every ASHRAE member had a chance to tour the exposition and attend various technical sessions and committee meetings. If you didn't learn something new you weren't paying attention! Much of the new technology that you saw or heard about came from research funded by ASHRAE. Please help these advancements in technology to continue by investing in ASHRAE Research. Every dollar that you invest in ASHRAE Research goes toward Research – nothing goes for administrative costs.

Thanks to the following new Individual Honor Roll participants:

- Jim Nemechek
- Dart Rinefort
- Mike Scofield

Thanks to the following Corporate Honor Roll participants:

- Glumac International
- Yamas Controls

Please make your check payable to ASHRAE Research and mail to:
Robert Levi
Carrier Corporation
PO Box 23130, Oakland, CA 94623
510/635-1237
If you would rather charge your donation to a credit card, please pick up one of the donation envelopes at the registration desk during the February meeting or call Bob Levi to request one.

ASHRAE GOLDEN GATE CHAPTER
JANUARY MEETING MINUTES
JANUARY 8, 1998

Meeting was called to order at 7:20 pm by Ernie French, President Elect. 67 members and guests were present. The minutes from the December 1997 meeting were approved as printed in the Fog Dispenser.

1. The Nominating Committee was announced and subsequently approved by motion. The committee is chaired by Roy Gifford (aka Santa) and consists of Dart Rinefort, Rick Paillon, Barbara Dilts, Karl Guttman and Gail Brager (alternate).
2. Mark Hydeman, Secretary, explained the draft roster and supporting lists that were on each of the tables. As of the printing of this Fog Dispenser it is too late to correct problems.
3. Ernie asked everyone to encourage students that they know to apply for scholarships. Last year the rate of acceptance was 100% (1 for each application). Interested parties should contact Jim Brugger at (510) 373-9568.
4. Ernie announced that Jean Choi has volunteered to be the new Reception Committee Chair.
5. Bob Levi, Research Chair, welcomed Dart Rinefort & Jim Nemechek to the research-honor-roll tri-fold table-top cards that were on display at every table. He reminded us that these cards will be on display for each meeting and will grow as new members or companies contribute to research at the honor roll level (⊇$100 individual or ⊇$150 corporate). Bob announced that Yamas will join the ranks next month.
6. Carl Jordan encouraged all to participate in the upcoming ASHRAE winter meeting. If you waited to read this message you missed a great opportunity.
7. Ernie, in the roll of Frank Mayhew, reminded us of the upcoming courses for the UC Berkeley Extension: "Temperature Controls for Heating and Air Conditioning Systems – X473", and "Operation and Maintenance of Air Conditioning Systems – X478". Both courses are part of the co-sponsored UC Berkeley and Golden Gate Chapter of ASHRAE HVAC/R Certificate program. "Temperature Controls for Heating and Air Conditioning Systems – X473" will be held on Wednesday nights from February 11th thru April 15th, 6:30 to 9:30 pm. "Operation and Maintenance of Air Conditioning Systems – X478" will be held on Monday nights from February 11th thru May 4th, 7:00 to 9:30 pm. Both courses will be held at the UC Extension downtown location on 4th and Howard Streets in San Francisco. The cost is $335 each course. For more information about these courses or to register, either call (510) 642-4151 or visit the website at, http://www.unex.berkeley.edu:4243/cert/hvac.html.
8. Mark Hydeman solicited suggestions for next year's Golden Gate Chapter evening programs. Mark can be reached at (415) 972-5498 or via email at mmh0@pge.com.

Respectfully Submitted,
Mark Hydeman, Secretary

News From the Redwood Empire

Steve Taylor spoke to the attendees of the December Empire meeting at Adobe Creek Golf Club. His topic was "Ventilation for Acceptable Indoor Air Quality". The talk was focused on the fundamentals of indoor air quality, the latest research and addressed codes which directly relate to IAQ.

The Redwood Empire appreciated Steve's enjoyable and informative contribution to their quarterly meeting.

Thanks Steve!!

Address changes should not be sent to the Fog Dispenser for any type of mailings. The mailing labels are taken directly from the National ASHRAE database and processed by Ginny Gifford. ***All ADDRESS CHANGES must be sent to National ASHRAE in order for us to change our records.*** *You can contact them at* ***1/800/5ASHRAE.***

ASHRAE Honor Roll

AF/C AIR FILTER / CONTROL

585 CHARCOT AVE., SAN JOSE, CA 9511 PHONE 408-433-0600 FAX 408-433-2200

SUPPLIERS OF EQUIPMENT TO THE BAY AREA HVAC INDUSTRY

Matt Goff	Jim Nemechek	Jack Hiatt
Scott Moyer	Dave Crum	Michael Donovan
Dean Holton	Becky Hill	Tim Casson
Linda Foley		Brian Quartaroli

Golden Gate Chapter
ASHRAE
41 Sutter Street Suite 401
San Francisco CA 94104-4903

FIRST CLASS MAIL

RICHARD A CHARLES
C & B CONSULTING ENGINEERS
150 SPEAR ST STE 500
SAN FRANCISCO, CA 94105-1537

FOG DISPENSER

Golden Gate Chapter ASHRAE

VOLUME XXXVII - NUMBER 5 **FEBRUARY, 1998**

Thursday, February 5, 1998

HAPPY VALENTINES

Location: Gabbiano's (upstairs)
1 Ferry Plaza, San Francisco, CA

Social Hour: 5:30 pm downstairs

Speaker: Kenneth R. Luther
ITT Fluid Handling
"Variable Speed Pumping"

Dinner: 6:30 pm

Cost: $ 30.00

To Reserve: Please **e-mail** your dinner reservation to Kent Lim by Monday, February 2nd If e-mail's not available a fax form is included for your convenience.

e-mail: **ashrae@essinc.com**
Phone: 415/822-1232
Fax: 415/822-6437

Gabbiano's is located near Pier 2, behind the Ferry Building (Clock Tower), one block from the Embarcadero BART station.

Don't forget!!!

Use the Golden Gate ASHRAE web site (remember it's case sensitive!)!

http://www.connet.com:8080/GGashrae/

Variable Speed Pumping

Ken Luther
ITT Fluid Handling
Manager Engineering Services

Mr. Luther is the Manager of Engineering Services of the Fluid Handling Division of ITT Fluid Technology Corporation, Morton Grove, Illinois. In this position he is responsible for the engineered products of Fluid Handling including Packaged Systems, Centrifugal Pumps and related accessories.

Previous to Fluid Handling, Mr. Luther, a civil engineer, was Marketing Manager for the Packaged Systems Group – ITT Bell & Gossett, held management positions with two international variable speed drive manufacturers, and was a consulting engineer for seven years.

Mr. Luther is a member of ASHRAE, where he is active in T.C. 1.9 – Electrical Systems (past chair and currently Standards sub-committee chair), T.C. 6.1 – Hydronic & Steam Heating Equipment and Systems, and T.C. 8.10 – Pumps and Hydronic Piping (currently secretary and Standards sub-committee chair), voting member of SSPC 90.1 – Standards Committee on Energy Efficient Design of New Buildings, ASPE and ASHE and has spoken at many of their society meetings. He has presented technical papers at ASHRAE, ISA and EPRI Annual Meetings and published papers on variable speed pumping in *Maintenance and Technology, Heating Piping and Air Conditioning* and the *Florida Specifier*.



FEBRUARY PRESIDENT'S MESSAGE

The new year has begun and what a year! It begins, I get the killer flu, the 49'rs lose to Green Bay and by the time you read this the Winter meeting is over. Right now I am really excited about the meeting. Due to Tom Reinarts and Dick Charles, the Host Committee and all the volunteers, I am sure it will all have gone well.

Students take notice that scholarship applications are now available, just ask Jim Brugger. The Golden Gate Chapter and the Eric Thor Andresen Memorial Scholarships are both $1000.00 this year. Please apply and let us give you the money.

Engineers' week is coming up this month, so look out for various activities.

This month's speaker on variable speed pumping will definitely be very interesting, don't miss it! I plan to be healthy and attend myself.

Respectfully submitted,
Dan Reiter, President

PS. Thanks Ernie for covering for me last month.

Fog Dispenser Deadlines
The ninth of the month preceding the meeting. All the news that fits gets printed.

Mail, fax, phone or email News by the 9th of the month preceding the meeting to:

FOG DISPENSER
Debbie Marshall, Editor, PACO Pumps
845 92nd Ave, Oakland, CA 94603
Telephone 510/639-3200. Ext. 232
Fax 510/639-3337
email paco_oak@pacbell.Net

Photojournalism Editor: Mike Scofield

Refer prospective new members to
Membership Chair:

John Small----------408/866-0723
FAX----------408/866-5899

For Roster corrections and address changes contact:
1/800/5ASHRAE

GGC database is based on the National Database. You need to contact national in order to change local information. This may take a couple of months.

Published monthly, October through June, by the **Golden Gate Chapter Of the American Society of Heating, Refrigerating and Air-Conditioning Engineers**, c/o Duplicating Associates, 370 Brennan St., San Francisco, CA 94107

1997-1998 OFFICERS
Dan Reiter.....President
Ernie French.....President Elect
Mark Hydeman.....Secretary
Ben Sun.....Treasurer

Board of Governors
Kent Lim, Joe Olivier, Dennis Thompson

ASHRAE GOLDEN GATE CHAPTER 1997-1998 COMMITTEES AND CHAIRPERSONS

Attendance	Dick Charles	Awards	Barbara Dilts	Auditing	Dennis Thompson
BAEC	Tom Reinarts	By-Laws	Roy Gifford	CRC Action	Ernie French
Database Manager	Ginny Gifford	Education/School	Jim Brugger	Fog Dispenser	Debbie Marshall
Golf	Dave Eisenberg	TEGA		Historian	
Honor Roll	Ellen Pierce	Marble Game	Edgar DeGuzman	Membership/Picnic	John Small
Product Show	N/A this year	PAOE	Dennis Thompson	Program	Ernie French
Publicity	Mike Scofield	Reception	(open)	Refrigeration	Dave West
Research	Bob Levi	Roster	Tim Provo	Web Page	Robert Marcial
Seminar	N/A	Tennis	Rich Leao	1998 Meeting	Tom Reinarts

.....SEEKING EMPLOYEES.....

Taylor Engineering is looking for mid to high level HVAC design engineers to join us as we expand our offering of engineering services. We specialize in innovative large building HVAC and control system design, energy and indoor air quality analysis, and system commissioning. Current projects include the new Pacific Stock Exchange and GAP Headquarters building in San Francisco and the PeopleSoft Data Center in Livermore. Prospective candidates must have a degree in physics or mechanical engineering, a thorough understanding of thermodynamics and fluid flow fundamentals, excellent presentation and writing skills, and 5 or more years of HVAC design experience. Candidates must be PC literate and have a working knowledge of Windows, Word, Excel and AutoCAD. The ideal candidate will also have a California PE registration, lead project management experience, hands-on knowledge of control systems and design/build or field experience. Excellent work environment in Alameda. High salaries for top performers.

Send resume to: Steve Taylor, Taylor Engineering, 1305 Marina Village Parkway, Alameda, CA, 94501-1028.
FAX: 510-749-9136
E-mail: staylor@taylor-engineering.com

Steve really wants your help, pleeeease contact him!

λλλλλλλλλλλλλλλλλλλλλλλλλλλλ

Engineer: ME with 2-7 years experience.

Position involves review, analysis and writing of technology assessments, interpreting R&D results, developing user guidelines and other technology transfer in HVAC/lighting/ electric and gas commercial – sector technologies. Requires broad view of the industry. **Send resume and copy of recent writing sample to Ms. Saunders, BKI, 501 14th St., Suite 200, Oakland, CA 94612**

λλλλλλλλλλλλλλλλλλλλλλλλλλλλ

BUILDING ENGINEERS
HVAC / MECHANICAL

Ove Arup & Partners is an international multidiscipline engineering consulting firm.

An opportunity currently exists for a Mechanical building design engineer to work on a variety of domestic and international projects in our San Francisco office. Bachelors degree required, with 2 – 3 years experience a plus.

Please send cover letter and resume to:
HR Manager #138
901 Market Street, #260
San Francisco, CA 94103
or Fax to 415/957-9096

ARUP EOE

Mechanical Engineer

Leadership opportunity. Established San Francisco firm seeks client-oriented project engineer/manager to lead projects and participate in marketing for commercial and institutional work.
Guttmann & Blaevoet, 55 Hawthorne Street, San Francisco, CA 94105, tel: (415) 512-8910, fax (415) 512-8784
e-mail: g&b@gb-eng.com

(This is a second month for this one too!)

αεργφρφεδφμη,λκ.κφϖγεβσφδσφνη

The Fog Dispenser will gladly print any advertisement for employment (whether you want to hire someone or you want to be hired). We ask that a $50.00 contribution be made to the research fund for each ad. Please contact Debbie Marshall for further details. You may contact Debbie at (510) 639-3200, ext. 232 or 272, or email at http://www.paco_oak@pacbell.net.

ASHRAE GOLDEN GATE CHAPTER PROGRAM SCHEDULE 1997-1998

This schedule will be repeated in each Fog Dispenser (room permitting). If you have questions, comments or suggestions, please contact Ernie French at Norman Wright Equipment Company (415) 777-5333.

Month	Subject	Speaker	Location
January	Refrigeration Night		Gabbiano's
February	Variable Speed Pumping and Energy Efficient Hydronic Systems		Gabbiano's
March	Diversity and Energy Savings in VAV Lab Design	Pete Hmelyer - Phoenix Controls	Gabbiano's
April	Utility Deregulation		PG&E Energy Center
May	Field Trip		??
June	Global Warming and other Environmental Impacts of the HVAC Industry		Gabbiano's

Board Motions – December 10, 1997

Increase The Eric Thor Andressen Memorial Scholarship to $1,000 from $750.
Passed 6 for, 0 against, 0 abstained.

Empower Bob Levi to change the Fog Dispenser Honor Roll procedure as necessary to augment his other research marketing efforts.
Passed 6 for, 0 against, 0 abstained.

The Board informally decided to hold a joint golf tournament with the San Jose Chapter.

NEED A CHANGE OF ENVIRONMENT? LOOK BELOW FOR OPPORTUNITIES

Taylor Engineering is looking for mid to high level HVAC design engineers to join us as we expand our offering of engineering services. We specialize in innovative large building HVAC and control system design, energy and indoor air quality analysis, and system commissioning. Current projects include the new Pacific Stock Exchange and GAP Headquarters building in San Francisco and the PeopleSoft Data Center in Livermore. Prospective candidates must have a degree in physics or mechanical engineering, a thorough understanding of thermodynamics and fluid flow fundamentals, excellent presentation and writing skills, and 5 or more years of HVAC design experience. Candidates must be PC literate and have a working knowledge of Windows, Word, Excel and AutoCAD. The ideal candidate will also have a California PE registration, lead project management experience, hands-on knowledge of control systems and design/build or field experience. Excellent work environment in Alameda. High salaries for top performers.

Send resume to: Steve Taylor, Taylor Engineering, 1305 Marina Village Parkway, Alameda, CA, 94501-1028. FAX: 510-749-9136
E-mail: staylor@taylor-engineering.com

Sales Representative

Dry Side Equipment representative of 28 years, located in the San Francisco/Sacramento area seeks aggressive sales person to add to our team of professionals selling Air Distribution products from major manufacturers. Air distribution sales experience is required. Excellent ground floor/growth opportunity to establish a sales base and call on engineering firms through a new Sacramento division of the company. Person must be located or willing to relocate to the Sacramento area. Excellent work atmosphere. Commission position with compensation commensurate with experience. **Fax resume to: (510) 222-2935.**

Mechanical Engineer

Leadership opportunity. Established San Francisco firm seeks client-oriented project engineer/manager to lead projects and participate in marketing for commercial and institutional work.
Guttmann & Blaevoet, 55 Hawthorne Street, San Francisco, CA 94105, tel: (415) 512-8910, fax (415) 512-8784
e-mail: g&b@gb-eng.com
Attn: Steven Guttman

Golden Gate Chapter

December Meeting Minutes
December 4, 1997

Meeting was called to order at 7:15 pm by Dan Reiter.

90 members and guests were present.

The minutes from the November 1997 meeting were approved as printed in the Fog Dispenser.



1) Frank Mayhew, Curmudgeon, and Richard Greco, Curmudgeon's Side Kick, announced their upcoming courses for the UC Berkeley Extension. Both Frank's course, "Temperature Controls for Heating and Air Conditioning Systems – X473", and Richard's course, "Operation and Maintenance of Air Conditioning Systems – S478" are part of the co-sponsored UC Berkeley and Golden Gate Chapter of ASHRAE HVAC/R Certificate program. "Temperature Controls for Heating and Air Conditioning Systems – X473" will be held on Wednesday nights from February 11 to April 15, 6:30 – 9:30 pm. "Operation and Maintenance of Air Conditioning Systems – X478" will be held on Monday nights from February 11 to May 4, 7:00 tp 9:30 pm. Both courses will be held at the UC Extension downtown location on 4th and Howard Streets in San Francisco. The courses each cost $335. For more information about these courses or to register, either call 510/642-4151 or visit the website at, http://www.unex.berkeley.edu:4243/cert/hvac.html.

2) Bob Levi, Research Chair, explained the new research-honor roll tri-fold table-top cards that were on display at every table. Listed on each are the names of this year's research honor roll participants. These cards will be on display for each meeting and will grow as new members or companies contribute to research at the honor roll level (≥$100 individual or ≥$150 corporate). Bob reminded us that 100% of the research contributions are tax deductible.



3) Mark Hydeman, Secretary, explained the roster lists that were on each of the tables. Two lists were produced: 1) members with current chapter dues paid with all of the roster information that we presently have for them; and 2) a list showing members that are indicated as current dues unpaid. Both of these lists reflected the most up to date information that we have from ASHRAE Society's central database. Mark asked for a show of hands of individuals that had incorrect information displayed. Approximately 7 people raised their hands (unfortunately one was Dick Charles, Presidential/Life Member who was displayed as unpaid). To correct problems and guarantee a place in the roster **(TO BE PRINTED IN JANUARY)** members must do the following:

   A) Contact ASHRAE at 1-800-5ASHRAE to correct their information
   B) Fax Ginny Gifford the updated information at (510) 932-6580.

4) Robert Marcial, Website Chair, announced changes and additions to the chapter website http://www.connet.com/Ggashrae. (Note that this UPR is case sensitive.) The latest addition is the on-line Fog Dispenser. Members that want to download their Fog dispenser can save the chapter money by registering as an electronic member by emailing Mark Hydeman at mmh0@pge.com. Electronic members will not receive a hard copy of the Fog Dispenser. Robert also is looking for volunteers to help him in developing and maintaining the chapter website. Interested parties should contact Robert at rmarcial@uclink4.berkeley.edu. Robert is also looking for feedback and comments on the website.

5) Dick Charles, 1998 Winter Meeting Co-Chair, encouraged all members to take advantage of the UC Berkeley Extension courses and to participate in this wonderful and rare opportunity to be part of an ASHRAE meeting. The last ASHRAE meetings held in San Francisco were in 1986 and 1970. The trade exposition at the 1998 meeting sold out of tables over 2 months ago and will host over 900 booths. Dick encouraged all members to pre-register for the meeting or trade exposition both to save money and time. As a reminder, all monitors will get free registration to both. Dick also encouraged all interested individuals to sit in on the technical and standard committees (TC's, SPC's and SSPC's). These committee meetings are open to the public, including non-members an people who are not registered for the meeting.

6) A complete program of the seminars, sessions and committee meetings was published in the latest issue of ASHRAE Insights. It is also available on-line at http://www.ashrae.org/ (look under Meetings Conferences and Shows, 1998 ASHRAE Winter Meeting).

Respectfully Submitted,
Mark Hydeman
Secretary

The Staff of the Fog Dispenser hopes everyone had a wonderful holiday and that the New Year will bring you success and fulfillment.

ASHRAE
Honor Roll

Phoenix Controls
Corporation

Manufacturer of Precision Airflow Controls

Bill Schultz, Western Regional Sales Manager
2000 Powell Street, #1200 Emeryville, CA 94608
Phone: (510) 596-1788 FAX: (510) 596-1789

Distributed in Northern California by
Norman Wright Mechanical Equipment Corporation

Airflow Controls

Golden Gate Chapter
ASHRAE
41 Sutter Street Suite 401
San Francisco CA 94104-4903

FIRST CLASS MAIL

SAN FRANCISCO CA PM 1997

DANIEL B REITER
WINZLER & KELLEY
PO BOX 6798
SANTA ROSA, CA 95406-0798

RECEIVED
DEC 31 1997
WINZLER & KELLY
SANTA ROSA

95406-0798

FOG DISPENSER

Golden Gate Chapter ASHRAE

VOLUME XXXVII - NUMBER 4 JANUARY, 1998

Thursday, January 8, 1998

HAPPY NEW YEAR

Location: Gabbiano's (upstairs)
1 Ferry Plaza, San Francisco, CA

Social Hour: 5:30 pm downstairs

Speaker: Bill Martini
Tecogen Incorporated
"Applications and Economics of Natural Gas Engine-Driven Chillers"

Dinner: 6:30 pm

Cost: $ 30.00

To Reserve: Please **e-mail** your dinner reservation to Kent Lim by Monday, January 5th. If e-mail's not available a fax form is included for your convenience.

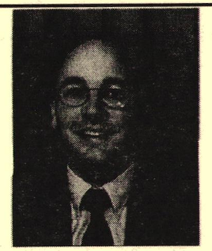
e-mail: **ashrae@essinc.com**
Phone: 415/822-1232
Fax: 415/822-6437

Gabbiano's is located near Pier 2, behind the Ferry Building (Clock Tower), one block from the Embarcadero BART station.

Don't forget!!!

Use the Golden Gate ASHRAE web site (remember it's case sensitive!)!

http://www.connet.com:8080/GGashrae/



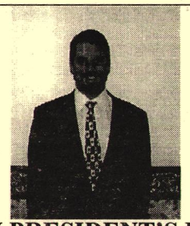
Applications and Economics of Natural Gas Engine-Driven Chillers

Bill Martini – Tecogen Incorporated

Bill will discuss technical developments in, and feasibility of, the latest generation of natural gas engine-driven chillers. Engine-driven chillers are increasingly establishing themselves as economical and reliable components in cooling plants, in a wide variety of building. Included will be a discussion of gas engine chiller technical/application issues, maintenance requirements, a detailed economic/energy saving analysis based on local utility rates, and local installations.

Bill Martini is District Manager for Tecogen, based in Portland, Oregon. He is responsible for marketing Tecogen's Tecochill Natural Gas Engine Driven Chillers and Cogeneration Modules to hospitals, schools, colleges and industry. He is responsible for the Western US, west of the Mississippi River.

Prior to joining Tecogen in 1985, Bill spent 5 years as a Cogeneration Engineer for Pacific Gas and Electric Company, based in San Francisco. Bill holds an engineering degree from Dartmouth College in New Hampshire.



JANUARY PRESIDENT'S MESSAGE

Happy New Year!!! I hope everyone had a great time over the holidays. This is traditionally the time of year we reflect on the past year and make goals for the new year. Looking back on 1997 everyone I've talked to had the same thoughts, that it was a great year for business and that they were too busy. Most of us probably lost some social and family time to work. Obviously, our goals for this new year should include gaining that family and social time back while maintaining business. I guess we will have to hire some help. Good Luck!!

Students and friends of students be aware the Golden Gate Scholarship and the Eric Thor Andressen Memorial Scholarship applications are available now. These both offer a $1,000.00! What an easy way to make money for school; it sure beats washing dishes at the cafeteria.

1998 Winter Meeting is just a few weeks away, do not miss this opportunity to participate and observe ASHRAE Society as work. Listen in on the committees that put our Handbooks together, participate in technical committee discussions on your favorite topics, check out the equipment expo and have fun at the social events. Only the foolish will miss this spectacular event!

See you at the chapter meeting and the Society Winter meeting.

Respectfully Submitted,
Dan Reiter
President

PS: Does anyone know where our banner is??

Fog Dispenser Deadlines
The ninth of the month preceding the meeting. All the news that fits gets printed.

Mail, fax, phone or email News by the 9th of the month preceding the meeting to:

FOG DISPENSER
Debbie Marshall, Editor, PACO Pumps
845 92nd Ave, Oakland, CA 94603
Telephone 510/639-3200. Ext. 232
Fax 510/639-3337
email paco_oak@pacbell.net

Photojournalism Editor: Mike Scofield

Refer prospective new members to
Membership Chair:

John Small----------408/866-0723
FAX----------408/866-5899

For Roster corrections and address changes contact:
1/800/5ASHRAE

GGC database is based on the National Database. You need to contact national in order to change local information. This may take a couple of months.

Published monthly, October through June, by the **Golden Gate Chapter Of the American Society of Heating, Refrigerating and Air-Conditioning Engineers**, c/o Duplicating Associates, 370 Brennan St., San Francisco, CA 94107

1997-1998 OFFICERS

Dan Reiter.....President
Ernie French.....President Elect
Mark Hydeman.....Secretary
Ben Sun.....Treasurer

Board of Governors
Kent Lim, Joe Olivier, Dennis Thompson

ASHRAE GOLDEN GATE CHAPTER 1997-1998 COMMITTEES AND CHAIRPERSONS

Attendance	Dick Charles	Awards	Barbara Dilts	Auditing	Dennis Thompson
BAEC	Tom Reinarts	By-Laws	Roy Gifford	CRC Action	Ernie French
Database Manager	Ginny Gifford	Education/School	Jim Brugger	Fog Dispenser	Debbie Marshall
Golf	Dave Eisenberg	TEGA		Historian	
Honor Roll	Ellen Pierce	Marble Game	Edgar DeGuzman	Membership/Picnic	John Small
Product Show	N/A this year	PAOE	Dennis Thompson	Program	Ernie French
Publicity	Mike Scofield	Reception	(open)	Refrigeration	Dave West
Research	Bob Levi	Roster	Tim Provo	Web Page	Robert Marcial
Seminar	N/A	Tennis	Rich Leao	1998 Meeting	Tom Reinarts

ASHRAE RESEARCH

This month ASHRAE is bringing to San Francisco the World Showcase for HVAC&R Systems, Equipment and Technology. Please show your support with an investment in ASHRAE Research.

Please make your check payable to ASHRAE Research and mail to:

Robert Levi
c/o Carrier Corporation
PO Box 23130
Oakland, CA 94623
510/635-1237

If you would rather charge your donation to a credit card, please pick up one of the pledge envelopes at the registration desk during the January meeting or call Bob Levi to request one.

ROSTER NON-ADS DUE

Tim Provo is looking for "non-ads" for this year's roster. The roster will be printed in January so it's now or wait 'til next year (and you really don't want to do that!). The rates are the same as last year:

$ 150.00 = full page
etc.

Contact Tim Provo at 510/758-3721 for information on rates, space and remit to location.

The Fog Dispenser is finally on-line. Please e-mail any and all items to paco_oak@pacbell.net.

The Fog Dispenser is a great way to advertise employment opportunities within your firms, special programs that may benefit our industry, etc. Call Debbie Marshall for information on rates, etc.

HAPPY NEW YEAR!!!

ASHRAE Honor Roll

KENT M. LIM & COMPANY, INC.
SHEETMETAL & MECHANICAL CONTRACTOR
LICENSE NO. 471450
1260 EGBERT AVENUE
SAN FRANCISCO, CA 94124

(415) 822-1232
FAX (415) 822-6437

KENT M. LIM
TONY FUNG
SAM KALSTAD
TIM SHORE
PHIL HARRIS
SHIRLEY LIM
MARTHA KRAFT
SHARON DRUMMOND

Golden Gate Chapter
ASHRAE
41 Sutter Street Suite 401
San Francisco CA 94104-4903

FIRST CLASS MAIL



RICHARD A CHARLES
C & B CONSULTING ENGINEERS
150 SPEAR ST STE 500
SAN FRANCISCO, CA 94105-1537

758
9
807

8/12
Maybe Beckwith
Is Smoke A Concern with
The SF Bldg Dept.

FOG DISPENSER

Golden Gate Chapter ASHRAE

VOLUME XXXVII - NUMBER 1 OCTOBER, 1998

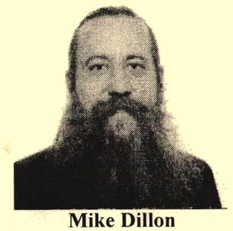
Golden Gate Chapter Program Announcement
Thursday October 1st, 1998

Location: Gabbiano's Restaurant, 1 Ferry Plaza, Pier 2 San Fran. (near Embarcadero & Market Streets)
Date: Thursday October 1st, 1998.
Time: 5:30 pm Social Hour
6:30 pm Dinner
8:00 pm Program
9:00 pm Formal Meeting Adjournment
Program Title: Up in Smoke: The Controversy Over the UBC 905 Smoke Control Requirements
Speakers: Jeff Maddox of RJA Group Inc.
Mike Dillon of Dillon Consulting Engineers
Moderator: Dick Charles of C & B Consulting Engineers


Jeff Maddox

925 938 3550

Jeff Maddox is a Senior Consulting Engineer with the RJA Group Inc., Walnut Creek office. He is a registered Fire Protection Engineer and holds a B.S. in Fire Protection Engineering from the University of Maryland. He has been the lead FPE on numerous projects involving smoke control in the Bay area and elsewhere.
Mike Dillon is the president of Dillon Consulting Engineers in Long Beach. He is a fellow in ASHRAE, CIBSE, IRHACE and IAE. He is also an active member of ASME, ASCE and SFPE. Mike is a practicing engineer and lecturer with impressive list of accomplishments. He is very active in codes and standards work including work at ASHRAE, ICBO and NFPA. Mike was the principle author of Section 905 of the Uniform Building Code (UBC).


Mike Dillon

At this opening meeting of the 1998/99 Golden Gate Chapter season, we are pleased to have a program that should spark both interest and discussion. **"Could the UBC Section 905 Requirements be less burdensome (time and cost) and retain the same level of stringency?"** Our distinguished speakers Jeff Maddox and Mike Dillon will provide different expert perspectives on this question. After the prepared presentations, this program is designed to have an open forum for member participation. Bring your questions and interest.

The format for the presentation will be as follows:
10 minute prepared opening statement (each speaker)
20 minute public question and answer period
7 minutes closing remarks (each speaker)

Cost: $30.00 Reserve by Monday, 9/28/98
To Reserve: Please email or fax your dinner reservation to Joe Olivier @ 415/296-9761, email: ggashrae@essinc.com
Phone: 415/296-9700, ext. 100

Ernie's picture will appear here shortly!

It is with tremendous energy, enthusiasm and excitement that I write this, my first President's Message. This year's goals are simple. We want to do more of all of the things everyone likes, and less of the things people don't want. We want to provide an opportunity to socialize while gaining valuable knowledge through quality HVAC&R programs. We want to hold to a minimum any time consuming business items. Finally, we want to encourage more participation in the activities of the chapter.

As in previous years each meeting will begin with the cocktail hour. Many members think this is the best part of the entire meeting. These monthly meetings are about the only time you can share a cocktail with a friend, competitor, customer, vendor, boss, employee and someone you've never met all at the same time.

The chapter's business is important. A very short business meeting will be held right after dinner.

There has been a tremendous effort to bring professional, high quality programs to these meetings. This year's program line up promises to be both educational and interesting. Mark Hydeman, Program Chair and President-Elect, starts the year with plenty of fireworks and a very hot topic as Jeff Maddox and Mike Dillon square off with their views on UBC 905 Smoke Control. December will hold the first ever joint meeting with the San Jose Chapter. Two chapters and a program on two-duct systems should make for an interesting night.

Keep in mind, there are plenty of opportunities to get involved with chapter activities. We still need someone to chair the Seminar committee and someone to spearhead the Honors and Awards program. In addition, a number of committee chairs could use help in planning their activities. If you would like to get more involved or have comments or suggestions on this year's activities, please give me a call (415) 467-7600.

Please join me in making this the best year ever for the Golden Gate Chapter of ASHRAE.

Sincerely submitted,
Ernie French, President

Fog Dispenser Deadlines
The ninth of the month preceding the meeting. All the news that fits gets printed.

Mail, fax, phone or email News by the 9th of the month preceding the meeting to:
FOG DISPENSER
Debbie Marshall, Editor, PACO Pumps
845 92nd Ave, Oakland, CA 94603
Telephone 510/639-3200. Ext. 232
Fax 510/639-3337
email PACO_OAK@Pacbell.Net

Photojournalism Editor: Mike Scofield

Refer prospective new members to
Membership Chair:
Edgar DeGuzman…..650/594-0182
FAX…… …….650/594-4915

For Roster corrections and address changes contact: 1/800/5ASHRAE

GGC database is based on the National Database. You need to contact national in order to change local information. This may take a couple of months.

Published monthly, October through June, by the **Golden Gate Chapter Of the American Society of Heating, Refrigerating and Air-Conditioning Engineers**, c/o Duplicating Associates, 41 Sutter St., Ste. 1401., San Francisco, CA 94104-4903

1998-1999 OFFICERS
Ernie French……..…….President
Mark Hydeman……President Elect
Ben Sun ……Secretary
Kent Lim……..…….Treasurer
Board of Governors
Joe Olivier, Dennis Thompson, Dan Reiter

ASHRAE GOLDEN GATE CHAPTER 1997-1998 COMMITTEES AND CHAIRPERSONS

Attendance	Dick Charles	Awards	?	Auditing	Thomas Gilbertson
BAEC	Tom Reinarts	Redwood Empire	Phil Russo	CRC Action	Mark Hydeman
Database Manager	Allan Daly	Student Activities	Robin James	Fog Dispenser	Debbie Marshall
Golf	Charlene Sturm	TEGA	Gary Margadant	Historian	Chris Cummings
Honor Roll	Bob Levi	Marble Game	Edgar DeGuzman	Membership/Picnic	Edgar DeGuzman
Product Show	Cory Palmer	PAOE	Dan Reiter	Program	Mark Hydeman
Publicity	Mike Scofield	Reception	Jean Choi	Refrigeration	Dave Martin
Research	Bob Levi	Roster	Tim Provo	Website	Robert Marcial
Seminar	?	Tennis	Dan Noone	By-Laws	?

Golden Gate Chapter email address: www.ggashrae.org

HONEYWELL, INC
Home & Building Control
21270 Cabot Blvd., Hayward, CA, 94545
Attn: C. Ward
Fax: 510/265-2145
Website: www.honeywell.com
EOE M/F/H/V
Drug Screening is a Condition of Employment

Mechanical Design Lead Engineer – San Francisco

Duties and Responsibilities
Job responsibilities include engineering design and management for commercial HVAC and plumbing design, central plant design, equipment and fixture selection, equipment sizing, system layout, and specification development. Management responsibility includes oversight of a small group of mechanical and electrical engineers and drafters.
Additional responsibilities include project management, field investigations, construction support and system commissioning.

Qualifications
Minimum qualifications include a BSME degree and 10 years experience in commercial HVAC and plumbing design. Professional registration in California is required. Proficiency with AutoCAD and MS Office is required. Candidate must possess good organizational skills, be enthusiastic, responsible, committed and willing to travel. This position requires an individual who is self directed and able to work effectively in a team environment.
Hands on experience with mechanical system installation and operation is desirable.

Contact: Christine Esparza
Newcomb Anderson
esparza@newcombanderson.com
Fax: 415/ 434-2321
Phn: 415/ 434-2600

Memories from the last meeting:



Mike Scofield, '97-'98 president of the Redwood Empire Section.



Dan Reiter, '97-'98 President, GGC ASHRAE

Well……

I was going to put the minutes from the last meeting of the '97 – '98 year here but did not receive them in time from the author.

We'll have to wait until the next newsletter to hear from our new Secretary.



ASHRAE GOLDEN GATE CHAPTER PROGRAM SCHEDULE 1998-1999

This schedule will be repeated in each Fog Dispenser (room permitting). If you have questions, comments or suggestions, please contact Mark Hydeman @ PGE Energy Center, 415/972-5498, MMH0@pge.com.

Month	Subject	Speaker	Location
October	Controversy over the UBC 905 Smoke Control Requirements	Jeff Maddok, Rolf Jensen and Mike Dillon, Dillon Cons. Eng	Gabbiano's
November	Low Delta –T Syndrome in Chilled Water Plants, Causes and Mitigation	Steve Taylor, Taylor Eng. (ASHRAE distinguished lecturer)	PG&E Pacific Energy Center
December	Joint Meeting w/ San Jose Chapter Dual-Fan Dual-Duct Systems, is VAV Reheat a Dinosaur?	Dave Warden, DWT Engineering	Hotel Sofitel, Rwd City
January	Mano to Mano: Design Build or Plan and Specification	Clark Bisel, Flack & Kurtz and Glenn Friedman, American Mechanical Services	Gabbiano's
February	Condenser Water Optimization: Two Perspectives of Temperature and Flow	Mick Schwedler, Trane Co. and Roy Hubbard, York International	Gabbiano's
March	How Low Will You Go? Case Study of a Low Temperature Distribution System	Dave Knebel, Mammoth Inc, Don Schumacher, Air Research Diffuser Products, Inc., and Jan Black, Peters Eng.	Gabbiano's
April	Background for Field Trip: BART Transbay Tube Ventilation System	Jerry McCleery, BART	PG&E Pacific Energy Center
May	Field Trip to BART Transbay Tube Ventilation and Control Center	Colin McDonald, Jerry McCleery and douglass Hahn, BART	Meet at Gabbiano's
June	Speaking from Experience: "You know you are really married to (living with) an engineer when…."	Spouses, roommates and significant others tell all.	PG&E Pacific Energy Center



Field trip to San Francisco International Airport

EMPLOYMENT OPPORTUNITIES

Part Time Inside Sales

Air Treatment Corporation (manufacturers representative) is looking for an individual with industry experience and knowledge to perform part time inside sales and marketing. Work can be performed at either home or office, flexible hours. Retired individual a possibility. Contact Dave Eisenberg: (510) 655-3990, fax: (510) 655-7966.

Sales Reps at Honeywell

Honeywell's Home and Building Control organization is currently seeking candidates for joining our sales team as an Installed Systems Sales Representative. Prior experience with a Controls Company preferred. Opportunity is available in the San Francisco area.
Requirements:

- 3 – 5 years successful sales experience. Exp. selling conceptual products or services, preferred.
- Established network of business contacts in targeted markets (bldg owners, contractors, A&E firms.
- Experience in executive level selling, board presentations, structuring cash flow financial agreements, and building long term sales relationships.
- College degree in Engineering, Business, Marketing for Finance.
- Exceptional communication skills.
- Thorough understanding of control theory and experience estimating controls.

Honeywell offers an excellent compensation and benefits package plus state of the art support programs to enable you to be successful. For immediate consideration send resume to:

1997-98 ASHRAE RESEARCH ANNUAL REPORT
GOLDEN GATE CHAPTER

Congratulations on a good ASHRAE Research effort in 1997-98. Our chapter raised a total of $26,100 with 105 contributions. These results made us number one in Region X. Please congratulate each of the investors listed below.

INVESTORS OF MORE THAN $1,000

Flack + Kurtz Consulting Engineers
Kent M. Lim & Company, Inc.
Pacific Gas and Electric Company

INVESTORS OF $501 to $1,000

Richard A. Charles
Chevron Corporation
Thomas A. Gilbertson
Pacific Coast Trane
Norman Wright Mechanical Equipment

INVESTORS OF $251 to $500

Air Treatment Corporation
Edward A. Arens
Carrier Corporation
Keller & Gannon
Mechanical Contractors Association
Tempco Equipment Company
Dennis W. Thompson

INVESTORS OF $101 TO $250

Ajmani & Pamidi Incorporated
American Mechanical Services
Clyde Equipment Company
Fisher Consultants
Gayner Engineers
Glumac International
N.V. Heathorn Incorporated
Horn Engineers
Johnson Controls, Inc.
Carl H. Jordan
Laws & Associates
James T. MacDonald
Phoenix Controls Corporation
Michael A. Ratcliff
Max H. Sherman
Gerald Yaffe
Yamas Company Incorporated
York International

INVESTORS OF $100

Ronald W. Arthur
Bernard D. Beckius
Gail S. Brager
Robert A. DeChene
Ernie French
Peter A. Hartdegen Company
Robert Blake Hogue
Mark M. Hydeman
Robert F. Levi
Frank Mayhew
MHC Engineers
James G. Nemechek
John D. O'Brien
Joseph R. Olivier
PLA Corporation
Daniel B. Reiter
W. Dart Rinefort
C. Mike Scofield
Benjamin P. Sun
Steven T. Taylor
G. Robert Voelz
Nenad K. Zaric
Arthur L. Zigas

INVESTORS OF UP TO $99

Fred S. Bauman
Mark V. Belgarde
James L. Breese
Steven L. Blanc
The Brose Company
Michael T. Cory
James L. Davis
Aaron G. Deutsch
Barbara S. Dilts
Jeffrey A. Dittman
Brooks Enterprises
Charles C. Eskildsen
Dick H. Fujioka
Gustav J. Fehlhaber
John B. Gajan
Wayne L. Gaw
HDK Associates
Ted E. Jacob
Ronald O. Jang
David Lintott
Mon J. Lum
Jack W. Mannie
Allan J. Montpellier
James A. McCray
Charles William Nadig
Richard Louis Nagy
Fernando M. Palacios
Jack A. Palmer
David Scott Penney
Stephen P. Scaife
Alva Tabor
Todd A. Williams
Wayne H. Womer

The 1998-99 ASHRAE Research investment drive is off and running.
It is not too early to make your investment in our industry. Please make your check payable to ASHRAE Research and mail to:

Robert Levi
c/o Carrier Corporation
PO. Box 23130
Oakland, CA 94623
phone 510.635.1237



Join the crowd, invest in ASHRAE Research.

It is with great sadness that we are informing you of the passing of Gerald Kasin. Gerald passed away on August 19th in Berkeley at the age of 77. Kasin was a graduate of UC Berkeley. He founded the firm of Kasin Guttman and Associates, and together with his partner Karl Guttman designed the Mechanical Engineering Systems for numerous bay area hospitals, including SF General, Mt. Zion, California Pacific Medical Center and RK Davies Medical Center. He is survived by Edith, his life partner of 54 years, children Peter and Miriam, siblings Betty Shapiro, Larry and Billy Kasin.

ASHRAE Honor Roll

Established in 1982, ***ESS engineering*** provides unique and closely integrated energy-efficiency and information system services to a client base that spans the commercial, industrial, government, utility, and design communities.

Contact *ESS engineering* today for innovative solutions to complex building issues in:

- **Energy Master Planning**
- **Design & Implementation**
- **Energy Engineering**
- **Building Automation**

James Sadler, Senior VP
Corporate Headquarters:
64 East Broadway Road, Suite 230, Tempe, AZ 85282
TEL 602.884.4500 • FAX 602.784.4800

Joseph Olivier, Director
Western Regional Office:
114 Sansome Street, Suite 1201, San Francisco, CA 94104
TEL 415.296.9760 • FAX 415.296.9761

Or visit our website at www.essinc.com

ESSengineering
an ESS company

Golden Gate Chapter
ASHRAE
41 Sutter Street Suite 401
San Francisco CA 94104-4903

FIRST CLASS MAIL

SAN FRANCISCO CA OCT 27 1998

USA 32

RICHARD A CHARLES
C & B CONSULTING ENGINEERS
150 Spear St Ste 500
San Francisco CA 94105-1537

FOG DISPENSER

Golden Gate Chapter ASHRAE

VOLUME XXXVIII - NUMBER 2 **NOVEMBER, 1998**

Thursday November 5th, 1998

Location: **PG&E Pacific Energy Center**, 851 Howard Street San Francisco (Between 4th and 5th Streets)

Date: Thursday November 5th, 1998.

Time: 5:30 pm Social Hour
6:30 pm Dinner
8:00 pm Program
9:00 pm Formal Meeting Adjournment

Cost: $30.00

Reserve by Monday, 11/02/98

To Reserve: Please email or fax your dinner reservation to Joe Olivier:
Fax: 415/296-9761

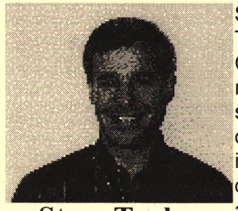
email: ggashrae@essinc.com

Phone: 415/296-9760, ext. 205 (last resort only)



Golden Gate Chapter Program Announcement

Program Title: Low Delta-T Syndrome in Chilled Water Plants, Causes and Mitigation
Speaker: Steve Taylor of Taylor Engineering



Steve Taylor

Steve Taylor is the principal of Taylor Engineering in Alameda California. He is a registered mechanical engineer specializing in HVAC system design, control system design, indoor air quality engineering, computerized building energy analysis, and HVAC system commissioning. Mr. Taylor graduated from Stanford University with a BS in Physics and a MS in Mechanical Engineering and has over 20 years of commercial HVAC system design and construction experience. He was the primary author of the HVAC sections of ASHRAE Standard 90.1-1989 and 1989R "Energy Standard for Buildings Except Low-Rise Residential Buildings" and California's Title 24 Energy Standards and Ventilation Standards. Mr. Taylor is presently chair of the committee revising ASHRAE Standard 62 "Ventilation for Acceptable Indoor Air Quality," he has served on Standard 62 since 1991.

Variable flow chilled water plants are designed to maintain a relatively constant "delta-T," the difference between return and supply chilled water temperature. But in almost every real chiller plant, delta-T falls well short of design levels. The result is that flow and load do not track, usually requiring that additional chillers be brought on-line to maintain flow requirements even though none of the chillers is fully loaded. Both pump energy and chiller energy increase accordingly. Many design and retrofit measures have been tried to resolve the problem, but they are often expensive and not always successful. The fact is, there is no way to avoid degrading delta-T in most systems. This presentation will explain the reasons why that is so and discuss some design and retrofit measures that will allow the plant to operate as efficiently as possible in spite of low delta-T. This talk is based on a paper that Steve presented at the Cool$ense National Forum for Integrated Chiller Retrofits (September 1997). Copies of the paper will be available at this meeting and on the Golden Gate Chapter Website.

****

Calling All Friends of Don Bryant

Don suffered a stroke nearly 2 years ago. Since that time his condition is stable but not improving. This would be a very good time to let Don know how much we appreciate him and his great contributions to our chapter and society.

In his decades of service for ASHRAE, Don has been a tireless advocate of continuing education. Don was the architect of the HVAC/R Certificate Program co-sponsored by the Golden Gate Capter of ASHRAE and University of California Extension Service. This program has been in operation since 1985 and has served hundreds of practitioners in the field. The program was so successful that it has been replicated with the Sacramento Valley Chapter (UC Davis Extension) and San Jose Chapter (UC Santa Cruz Extension.

At Society Don served as Chairman of the Education Committee, Chairman of an ASHRAE-ETS Ad-Hoc committee on continuing education, as a member of the Education Council and a Trustee of the ASHRAE National Scholarship Fund. Don was also instrumental in the foundation of the ASHRAE Continuing Education Committee which produces ASHRAE's Professional Development Seminars (PDS).

I have been in touch with Helga Bryant, his daughter-in-law, and she encourages all of us to send Don our best wishes at the Veteran's Hospital.

The address is as follows:

Don Bryant
C/o Veteran's Hospital
795 Willow Road, Bldg 331C
Menlo Park, CA 94025

Mark Hydeman
HVAC Program Coordinator
PG&E Pacific Energy Center
851 Howard Street
San Francisco, CA 94103

&&&&&&&&&&&&&&&&&&&&&&&&&&&&&

BOARD MEETING MINUTES

The Board approved a motion to purchase a new digital camera for $575.00. The existing digital camera will be a gift to the Redwood Empire section for their use.
Motion passed: 4 For, 1 Against

The Board approved a preliminary budget for fiscal year 1998-1999. Final computer based budget and financial report is due next month.
Motion passed: 5 For, 0 Against

The approved re-activation of a Code committee as recommended by Dick Glumac.
Motion approved: 6 For, 0 Against

Members who are interested in serving should contact Dick.

Ben Sun
Secretary

&&&&&&&&&&&&&&&&&&&&&&&&&&&&&

I apologize for the change in format of the Fog Dispenser this issue. Due to article lengths, some items were moved. Next issue should be back to normal.

Also, until further notice, email is not working for the Fog Dispenser. Please fax all items to 510/639-3337 or send a disk to my attention at PACO Pumps, 845 92nd Ave, Oakland, CA 94603. I'm hoping things will be fixed soon.

Thanks for your understanding and patience!

Debbie Marshall
Editor

ASHRAE GOLDEN GATE CHAPTER
DINNER RESERVATION FAX

For THURSDAY, November 5, 1998
Please send Fax by noon on Monday, November 2, 1998

FAX TO: **ESS Engineering, Joe Olivier**
FAX: **(415) 296-9761** Please call if you have any last minute changes in plans.
Phone: **(415) 296-9760, ext 205** *Please cancel your reservation if you cannot attend the meeting.*
e-mail: ashrae@essinc.com ***Preferred method of communication!***

FROM: DICK CHARLES

COMPANY: C&B ENGINEERS Phone: 415 442 0110

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

DICK CHARLES — ADAM BENZULY
PAUL O. NEIL — TIM CASADOS
DITTMAN, JEFFREY

LOCATION: PG&E Energy Center, 851 Howard Street (between 4th and 5th), San Francisco. Parking is across the street.

Student Sponsorship

Please show your support and sponsor a student or two (or more) by signing up below.
Your enthusiastic support and participation will be greatly appreciated!
You'll be recognized for your effort!

I/We think that students should join us therefore, I/We will be sponsoring _____ student(s) at $30.00 each **for this meeting**.

I/We would like to sponsor _____student(s) to enable he/she/them to attend ASHRAE meetings at $30.00 each, up to _____ **students per meeting**, and/or a total of _____ **students per year**.

Signature: _____

Company: _____ Phone: _____

Employment Opportunities

The Edward B. Ward Company is a 60 year old, $70 million per year wholesale distributor of Carrier Air Conditioning products. Our territory (including our subsidiary Valair Company) includes Northern California to the Oregon border, and East to Reno. Sales offices are in South San Francisco, Sacramento, San Jose, Concord and Fresno. There are 29 sales engineers employed by Edward B. Ward; most are graduate ME's or ENVE's.
We have immediate need for two full time inside sales support personnel, but would consider filling or augmenting these positions with a motivated co-op student that is task oriented, has initiative, strong organizational skills, and good "people" skills.

Job Description:

Inside Sales support for HVAC Sales Engineers. Responsibilities include:

- equipment selection/pricing
- order processing
- technical support
- preparation of submittals
- coordination of issues related to job progress from order to delivery
- research application issues

These positions have in the past been a training position of high visibility leading toward other position, particularly outside sales.

Contact: Mike Helmos
Edward B Ward & Company
Fax: 650/873-6829

$$

MICROTHERM

- **Step into the 21st century**
- **Join the fastest growing rep company in the country**
- **Best compensation plan in the industry**

Hiring for all position:

Base salary
Commissions
Full benefits
Expense account
Flex hours
Work from your home

Call 1.800.723.0450
All inquires strictly confidential

Advanced Microtherm, Inc. Fresno • Reno • Sacramento • San Francisco • San Jose

$$



The Fog Dispenser will gladly print any inquiry for employment whether you want to hire or you want to be hired. It's a great tool to reach those people you really want or who really want you! The publication generally is sent to the printer by mid-month so all "non-ads" should be faxed or mailed (hopefully email will work again shortly) by the 9th of the month preceding the next meeting. We ask that a $50.00 dollar contribution be made to Golden Gate Chapter ASHRAE for this service. The ad will not print without the donation.

You may contact Debbie Marshall, Fog Dispenser Editor at (510) 639-3200, ext 272 if you have any questions.

Student Night

November is traditionally Student night for the Golden Gate Chapter and this year is no exception. Students are encouraged to attend our chapter meeting and the chapter (or a Generous Sponsor) will pay the cost of their meal (a $30.00 value).
While we all recognize the need to promote ASHRAE and the HVAC/R industry to students, in today's fast and frenzied world, we do not always have time or know how to encourage students to get active in our industry. The Golden Gate Chapter has several programs in place that you, as a member, can become involved with.
The Student Activities committee spearheads all of these programs which include Engineer's week, judging the Bay Area Science Fair, outreach to the Student Chapters, and our Scholarship Program. Robin James is this year's Student Activities committee chair and would be happy to have assistance with these programs.
A bit more on the Scholarship program….The Golden Gate Chapter provides two scholarships each year: the Golden Gate Scholarship and The Eric Thor Andressen Memorial Scholarship. Both scholarship funds are held in trust by the Chapter and the interest from these funds are used to pay the scholarships of $1,000 each year.
The Golden Gate Scholarship is funded by private donations, and the Marble draw. Sixty percent of all Marble draw revenues are dedicated to this fund.
The Eric Thor Anreseen Memorial Scholarship was established in the memory of Eric Thor Andressen, a young and talented engineer at Glumac, who was tragically killed in a motorcycle accident. The scholarship fund and the Eric Thor Andressen Memorial Tennis Trophy (awarded at the annual Tennis Tournament) were established by Eric's family through a very generous donation. The profits from the Tennis Tournament are donated to the fund and typically the Andressen family provides an annual donation that matches or exceeds the Tennis Tournament profits.
The past four years the Chapter has had a budget surplus, which has allowed both Scholarships to be paid by the Chapter's General fund, effectively donating the $1,000 scholarship payments. In addition, this year an additional $2,000 was donated by the Chapter to each of the two scholarship funds.
Contact Robin James if you are interested in getting involved with Student Activities. If you are short on time, you can donate money to either scholarship fund by writing a check to: A) Golden Gate Scholarship Fund or B) Eric Thor Andressen Memorial Scholarship Fund (ETAMSF) and sending the check to Kent Lim (Treasurer) or myself.
Looking forward to seeing you on November 5th at the Energy Center.

Respectfully Submitted,
Ernie French, President

Fog Dispenser Deadlines
The ninth of the month preceding the meeting. All the news that fits gets printed.

Mail, fax, phone or email News by the 9th of the month preceding the meeting to:
FOG DISPENSER
Debbie Marshall, Editor, PACO Pumps
845 92nd Ave, Oakland, CA 94603
Telephone 510/639-3200. Ext. 232
Fax 510/639-3337
email PACO_OAK@Pacbell.Net

Photojournalism Editor: Mike Scofield

Refer prospective new members to ***Membership Chair:***

Edgar DeGuzman…..650/594-0182
FAX…… …….650/594-4915

For Roster corrections and address changes contact: 1/800/5ASHRAE

GGC database is based on the National Database. You need to contact national in order to change local information. This may take a couple of months.

Published monthly, October through June, by the **Golden Gate Chapter Of the American Society of Heating, Refrigerating and Air-Conditioning Engineers**, c/o Duplicating Associates, 41 Sutter St., Ste. 1401., San Francisco, CA 94104-4903

1998-1999 OFFICERS
Ernie French……President
Mark Hydeman……President Elect
Ben Sun ……Secretary
Kent Lim……Treasurer
Board of Governors
Joe Olivier, Dennis Thompson, Dan Reiter

ASHRAE GOLDEN GATE CHAPTER 1997-1998 COMMITTEES AND CHAIRPERSONS

Attendance	Dick Charles	Awards	?	Auditing	Thomas Gilbertson
BAEC	Tom Reinarts	Redwood Empire	Phil Russo	CRC Action	Mark Hydeman
Database Manager	Allan Daly	Student Activities	Robin James	Fog Dispenser	Debbie Marshall
Golf	Charlene Sturm	TEGA	Gary Margadant	Historian	Chris Cummings
Honor Roll	Bob Levi	Marble Game	Edgar DeGuzman	Membership/Picnic	Edgar DeGuzman
Product Show	Cory Palmer	PAOE	Dan Reiter	Program	Mark Hydeman
Publicity	Mike Scofield	Reception	Jean Choi	Refrigeration	Dave Martin
Research	Bob Levi	Roster	Tim Provo	Website	Robert Marcial
Seminar	?	Tennis	Dan Noone	By-Laws	?

Golden Gate Chapter web address: www.ggashrae.org

ASHRAE RESEARCH

The 1998-99 ASHRAE Research drive is underway. A contribution to ASHRAE Research is an investment in your future, and it is 100% tax deductible.

Thank you to the following people for their Personal Honor Roll contributions:

Robert Caughey	**Kent Lim**
Gustav Fehlhaber	**Joe Olivier**
Ernie French	**Nenad Saric**
Karl Guttmann	**Max Sherman**
Mark Hydeman	**Ben Sun**
Carl Jordan	**Dennis Thompson**
Robert Levi	**Robert Voelz**

Please note that the above list contains the names of the Golden Gate Chapter Board. They have led the way with their Personal Honor Roll contributions.

Thanks to the following Corporate Honor Roll Participants for their contributions:

Chevron Corporation
Laws & Associates
Kent M. Lim & Company, Inc
PLA Corporation

You too can be an Honor Roll participant. The minimums are $100 for a personal contribution and $150 for a corporate contribution. Please make your check payable to "ASHRAE Research" and mail to:

Robert Levi
Carrier Corporation
PO Box 23130
Oakland, CA 94623
510/635-1237



If you would rather charge your donation to a credit card, please pick up one on the donation envelopes at the registration desk during the November meeting or call Bob Levi to request one.

Congratulations to the winner of the Marble Game at the last meeting! The pot totaled over $745.00. We start anew so don't forget to buy those tickets.

^^

Did You Know??

The Society has published a Legionellosis position statement/position paper. It reads, in part:

1. "Avoid piping that is piped and has no flow (dead legs). If such piping exists after renovation , it should be removed from both domestic and cooling water systems."
2. "Control domestic water temperature to avoid temperature ranges when legionellae grow and to keep domestic cold water below 25°C (77°F) and hot water above 55°C (131°F). Measures to prevent scalding are essential."

The 12 page document is free from ASHRAE at 404/636-8400.

Carl H. Jordan

PG&E Energy Efficiency Rebate Program Extended

The deadline for the Pacific Gas and Electric Company Express Efficiency program has been extended from September 30 to December 31, 1998. That means you and your clients have three more months to earn up to $300,000 for putting new energy-efficient lighting, air conditioning, refrigeration or food service equipment in existing commercial, industrial or agricultural facilities.

Through the Express Efficiency program, your clients (or your own business) can earn:

*$8.10 for replacing old fluorescent lights in a f-foot, 3-lamp fixture with super –efficient T-8 lamps and electronic ballast,
*$40 for adding humidistat controls to a typical (10-ft) refrigerated display case,
*Up to $1,800 for installing variable frequency drives on HVAC fans
*And much more!!
Call 800-468-4743 for more information and application forms, or visit our web sit at www.pge.com/express.

ASHRAE Golden Gate Chapter Program Schedule
1998-1999

This schedule will be repeated in each Fog Dispenser (room permitting). If you have questions, comments or suggestions, please contact Mark Hydeman @ PGE Energy Center, 415/972-5498, MMH0@pge.com.

Month	Subject	Speaker	Location
November	Low Delta –T Syndrome in Chilled Water Plants, Causes and Mitigation	Steve Taylor, Taylor Eng. (ASHRAE distinguished lecturer)	PG&E Pacific Energy Center
December	Joint Meeting w/ San Jose Chapter Dual-Fan Dual-Duct Systems, is VAV Reheat a Dinosaur?	Dave Warden, DWT Engineering	Hotel Sofitel, Rwd City
January	Mano to Mano: Design Build or Plan and Specification	Clark Bisel, Flack & Kurtz and Glenn Friedman, American Mechanical Services	Gabbiano's
February	Condenser Water Optimization: Two Perspectives of Temperature and Flow	Mick Schwedler, Trane Co. and Roy Hubbard, York International	Gabbiano's
March	How Low Will You Go? Case Study of a Low Temperature Distribution System	Dave Knebel, Mammoth Inc, Don Schumacher, Air Research Diffuser Products, Inc., and Jan Black, Peters Eng.	Gabbiano's
April	Background for Field Trip: BART Transbay Tube Ventilation System	Jerry McCleery, BART	PG&E Pacific Energy Center
May	Field Trip to Yerba Buena Gardens – Tour mech. Sys. of ice rink and bowling alley		
June	Speaking from Experience: "You know you are really married to (living with) an engineer when…."	Spouses, roommates and significant others tell all.	PG&E Pacific Energy Center

ASHRAE Golden Gate Chapter
Meeting Minutes October 1st, 1998

Meeting was called to order at 7:25 p, by Ernie French, President. 132 members and guests were present.

1. Mark Hydeman, President-elect, encouraged all members to send cards and letters to Don Bryant. According to his daughter-in-law Helga, Don is stable but not recovering from his stroke of nearly two years ago. Mark printed mailing labels and distributed them at the meeting. Don's address is on the chapter website under ANNOUNCEMENTS and in the November issue of the Fog Dispenser.
2. Mark presented upcoming programs: The November 5th meeting is at the PG&E Pacific Energy Center. Steve Taylor is presenting a paper on "Low Delta T Syndrome in Chilled Water Plants: Causes and Mitigation." This presentation is based on a paper that Steve presented at the September 1997 Cool$ense National forum for Integrated Chiller Retrofits. A copy of the paper will be posted on the chapter website.
3. The December meeting (on WEDNESDAY, DECEMBER 9th) will be held at the Hotel Sofitel in Redwood City. This is a joint meeting with San Jose Chapter. Come early and watch the San Jose and Golden Gate Chapter boards have a tug-of-war. Winner gets the podium. The speaker is Dave Warden of DWT Engineering speaking on the applications of dual-fan dual-duct VAV Systems.
4. The May 13th field trip has been changed. It is now a field trip and family fun day. We have rented the new Yerba Buena Gardens Ice Skating Rink from 5pm – 7pm. There will be a tour of the ice plant and bowling alley mechanical systems. The rink will be open for skating during these two hours with complimentary skate rentals. Dinner will be at either Buca DiBeppo or Chevy's.
5. All programs will be announced in the Fog dispenser and on the Website.
6. Ernie French asked for a moment of silence to remember both Gerald Kasin and Mike Cory, both of whom recently passed away.
7. Bob Levi, Research Chair, reminded us that it is never to early to donate to research. He announced that Chevron Corporation has already made the honor roll with a contribution of $1,000 (thanks to Gary Margadant!). Personal $100 honor roll contributor include Joe Olivier, Mark Hydeman, Ernie French, Kent Lim and Bob Levi. Bob also recognized Steve Blanc for his Herculean effort to get a $10,000 donation from PG&E during the last calendar year. Bob asked me to note that many members contribute directly through Society when they renew their membership. Bob has not yet received their names from Society, but he thanks them in advance. "To forget is human, to donate is divine," Bob can be reached at 510/635-1237 or via email at robert.f.levi@carrier.utc.com. He accepts plastic, checks and currency.

Respectfully submitted,
Mark Hydeman
President Elect and Clean Up Batter

ASHRAE Honor Roll

Give Us A Call, Our Complete Sales, Engineering Design and Service Capabilities Make A Difference

R.F.MacDonald Co.

SERVING YOU SINCE 1956

25920 Eden Landing Road • Hayward, CA 94545-3816 • 510/784-0110 • FAX 510/784-1004

Visit our website at www.rfmacdonald.com

BOILERS • PUMPS • METERS • PARTS • SERVICE • SALES

Golden Gate Chapter
ASHRAE
41 Sutter Street Suite 401
San Francisco CA 94104-4903

FIRST CLASS MAIL

RECEIVED
DEC - 3 1998
C&B CONSULTING ENGINEERS

RICHARD A CHARLES
C & B CONSULTING ENGINEERS
150 Spear St Ste 500
San Francisco CA 94105-1537

FOG DISPENSER

Golden Gate Chapter ASHRAE

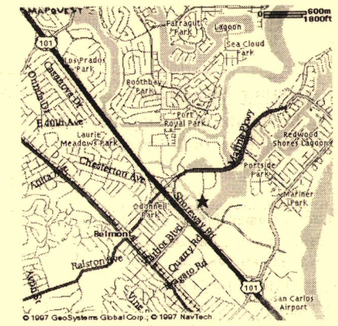
VOLUME XXXVII - NUMBER 3 **DECEMBER, 1998**

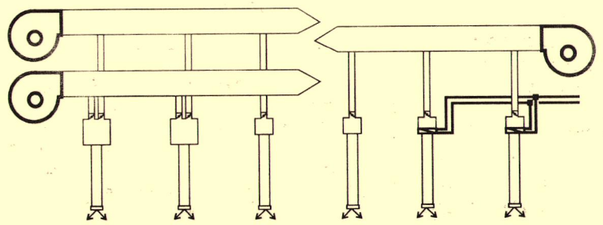
Golden Gate and San Jose Chapter Combined Program Announcement
Wednesday December 9th, 1998

Location: Hotel Sofitel
223 Twin Dolphin Dr
Redwood City, CA 94065
(650) 598-9000

Date: Wednesday December 9th, 1998.
Time: 5:30 pm Social Hour & Tug-of-War
6:30 pm Dinner
8:00 pm Program
9:00 pm Formal Meeting Adjournment

Program Title: Application and Design of Dual-Fan/Dual Duct VAV Systems: Why VAV Reheat May Be a Dinosaur







This program is a combined meeting of the Golden Gate and San Jose Chapters. Come join the fun as the two boards have a tug-of-war to determine which board president gets the podium!
Our speaker Dave Warden of DWT Engineering will provide a fresh look at dual-fan dual duct (DFDD) VAV systems and the advantages that they have over traditional VAV reheat systems. This program will be preceded by a full day DFDD design seminar offered free of charge at the PG&E Pacific Energy Center in San Francisco (415--973-7268 or http://www.pge.com/pec/progtoc/98fhvac.html/). DFDD VAV systems provide all of the benefits of VAV reheat with improvements in air circulation, a reduction in reheat energy and the ability to simultaneously recapture waste heat for heating while providing free economizer cooling. All of this at competitive per zone installed costs.

(see page 3 for biographical information)

Speaker: Dave Warden of DWT Engineering

Dave Warden's BIO
.....personally wrote Standard 62 .....
.....nice guy
.....really great speaker .....likes to have tomatoes lobbed at him.....

Due to email problems at the Fog Dispenser, Ernie's message will be printed at a later date. I'm sorry for the inconvenience. *DMarshall, editor*

Fog Dispenser Deadlines

The ninth of the month preceding the meeting. All the news that fits gets printed.

Mail, fax, phone or ~~email~~ News by the 9th of the month preceding the meeting to:

FOG DISPENSER

Debbie Marshall, Editor, PACO Pumps
845 92nd Ave, Oakland, CA 94603
Telephone 510/639-3200. Ext. 232
Fax 510/639-3337
email ~~PACO_OAK@Pacbell.Net~~

Photojournalism Editor: Mike Scofield

Refer prospective new members to ***Membership Chair:***

Edgar DeGuzman…..650/594-0182
FAX…… ……650/594-4915

For Roster corrections and address changes contact: 1/800/5ASHRAE

GGC database is based on the National Database. You need to contact national in order to change local information. This may take a couple of months.

Published monthly, October through June, by the **Golden Gate Chapter Of the American Society of Heating, Refrigerating and Air-Conditioning Engineers**, c/o Duplicating Associates, 41 Sutter St., Ste. 1401., San Francisco, CA 94104-4903

1998-1999 OFFICERS

Ernie French……..……President
Mark Hydeman……President Elect
Ben Sun ……Secretary
Kent Lim…..……Treasurer

Board of Governors
Joe Olivier, John Small, Dan Reiter

ASHRAE GOLDEN GATE CHAPTER 1998-1999 COMMITTEES AND CHAIRPERSONS

Attendance	Dick Charles	Awards	?	Auditing	Thomas Gilbertson
BAEC	Tom Reinarts	Redwood Empire	Phil Russo	CRC Action	Mark Hydeman
Database Manager	Allan Daly	Student Activities	Robin James	Fog Dispenser	Debbie Marshall
Golf	Charlene Sturm	TEGA	Gary Margadant	Historian	Chris Cummings
Honor Roll	Bob Levi	Marble Game	Edgar DeGuzman	Membership/Picnic	Edgar DeGuzman
Product Show	Cory Palmer	PAOE	Dan Reiter	Program	Mark Hydeman
Publicity	Mike Scofield	Reception	Jean Choi	Refrigeration	Dave Martin
Research	Bob Levi	Roster	Tim Provo	Website	Robert Marcial
Seminar	?	Tennis	Dan Noone	By-Laws	?

Golden Gate Chapter email address: www.ggashrae.org

ASHRAE GOLDEN GATE CHAPTER DINNER RESERVATION FAX

For Wednesday, December 9th
Please send Fax by noon on Monday, December 7, 1998

FAX TO: **Joe Olivier, ESS Engineering**
FAX: **(415) 396-9761**
Phone: **(415) 296-9700,ext 100**
e-mail: **ashrae@essinc.com**

Please call if you have any last minute changes in plans.
Please cancel your reservation if you cannot attend the meeting.
Preferred method of communication!

FROM: _____

COMPANY: _____ Phone: _____

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

_____ _____

_____ _____

_____ _____

LOCATION: Hotel Sofitel
223 Twin Dolphin Dr
Redwood City
650/598-9000

5:30pm Social Hour & Tug of War
6:30pm Dinner
8:00pm Program
9:00pm Formal Meeting Adjournment

Public parking is available next to Chevy's across the street from the PG&E Energy Center.

(Don't destroy our natural resources, use e-mail!)



Database Corrections!!!

(This includes address changes for the newsletter!)

For corrections to the database choose one of the following methods:

1. Email (preferred choice) it to Allan Daly, Golden Gate Chapter Database Chair: allan.daly@arup.com. *(See insert.)*
2. Fax it to Allan Daly, Golden Gate Database Chair: 415/957-9096
3. Submit the changes in the MEMBERS – ONLY section of the ASHRAE Society website: http://www.ashrae.org/
4. Call ASHRAE and make the change on the phone: 1/800/5-ASHRAE (1/800/527-4723).

ROSTER

The Golden Gate Chapter Roster will be printed in January of 1999. Each chapter member must have their dues paid and their information correct as indicated by ASHRAE Society's database by 1/1/99 to be included in the roster! Act now or forgo your rights to wimper.

ASHRAE Golden Gate Chapter
November 5, 1998 Meeting Minutes

Motion for approval of October Meeting passed.

Ernie announced that Dick Glumac is the Code Committee Chair, all parties interested in participating should contact Dick.

Regional Vice Chair of Research, Mr. Dennis Thompson encourages the members to donate to this worthy cause.

Robin James, Education and Student Activities Chair, announced:

- Maritime Academy is seeking a teacher of HVAC courses. Persons interested may contact Robin for details.
- All students applying for the scholarships will receive a free student membership from the Chapter.

Mark Hydeman announced the next meeting is a joint meeting with the San Jose Chapter on December 9th at the Hotel Sofitel in Redwood City.

Self-Introduction at 7:15 PM.

Mark introduced Steve Taylor. Details of Steve's lively presentation can be found on the Chapter web site.

Meeting adjourned at 9:00 pm.

Respectfully Submitted,
Ben Sun, Secretary

Dave Warden's Accurate Biography

Although the biography on the first page is true, the following is a more accurate accounting of Dave's adventures……

Dave Warden, P. Eng. is a Principal of DWT Engineering, a consulting engineering firm based in Victoria, British Columbia. He is an expert in the application and design of dual-fan dual-duct VAV (DFDD VAV) systems with projects dating back to the 1970's. Dave had developed DFDD VAV designs that maximize the comfort, air quality, adaptability, maintainability and energy advantages while maintaining lower first costs and plant space requirements than the conventional alternatives. Dave has 33 years of HVAC design, installation and operation experience, and is a member of ASHRAE Standard 62, "Ventilation for Indoor Air Quality." He has practical experience and advice for the opportunities and pitfalls in design, construction, commissioning and operation of DFDD VAV systems. He is a prolific author and has two DFDD VAV related articles in the ASHRAE Journal (June of 1995 & January 1996).

The November meeting was Student Night!



Robin James, Student Committee Chair, explains what activities are planned for this year and will be sending a copy to be included in the next Fog Dispenser.



Some of our up and coming engineers, congratulations and welcome!!

Part Time Teaching Position Open – HVAC

The California Maritime Academy is seeking applications from qualified individuals to teach a 3-credit course in HVAC beginning January 1999. The course runs Tuesday evenings from 6 – 9 PM from January 2nd through April 20th 1999.

The course covers the operation and practical design of HVAC systems, including chiller systems, absorption systems, heat pumps, fans, ductwork, VAV systems and IAQ (Indoor Air Quality).

Qualified individuals would have a BS Degree in Mechanical Engineering or equivalent, and significant experience in operation or design of HVAC systems. A MS degree or PE would be preferred.

The course is taught through an interactive video-conferencing system to be broadcast to several sites. Typical students range from undergraduate engineering and technology students to professionals in the field of facilities operations – mostly in hospitals.

Interested applicants should send their resume to:

Steve Kreta, Dean
California Maritime Academy
PO Box 1392
Vallejo, CA 94590
Ph: 707/654-1019
Fax: 707/654-1110
skreta@csum.edu

ASHRAE GOLDEN GATE CHAPTER PROGRAM SCHEDULE 1998-1999

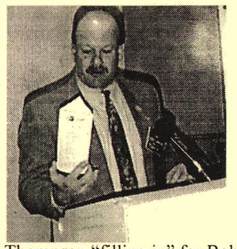
This schedule will be repeated in each Fog Dispenser (room permitting). If you have questions, comments or suggestions, please contact Mark Hydeman @ PGE Energy Center, 415/972-5498, MMH0@pge.com.

Month	Subject	Speaker	Location
December	Joint Meeting w/ San Jose Chapter Dual-Fan Dual-Duct Systems, is VAV Reheat a Dinosaur?	Dave Warden, DWT Engineering	Hotel Sofitel, Rwd City
January	Mano to Mano: Design Build or Plan and Specification	Clark Bisel, Flack & Kurtz and Glenn Friedman, American Mechanical Services	Gabbiano's
February	Condenser Water Optimization: Two Perspectives of Temperature and Flow	Mick Schwedler, Trane Co. and Roy Hubbard, York International	Gabbiano's
March	How Low Will You Go? Case Study of a Low Temperature Distribution System	Dave Knebel, Mammoth Inc, Don Schumacher, Air Research Diffuser Products, Inc., and Jan Black, Peters Eng.	Gabbiano's
April	Background for Field Trip: BART Transbay Tube Ventilation System	Jerry McCleery, BART	PG&E Pacific Energy Center
May	Field Trip to BART Transbay Tube Ventilation and Control Center	Colin McDonald, Jerry McCleery and douglass Hahn, BART	Meet at Gabbiano's
June	Speaking from Experience: "You know you are really married to (living with) an engineer when…."	Spouses, roommates and significant others tell all.	PG&E Pacific Energy Center

ASHRAE RESEARCH

In 1998 how many times did you refer to an ASHRAE handbook or pocket guide? Did you learn something new from a Journal article? The majority of the funding for this information comes from our ASHRAE Research contributions. Currently over 90 research projects are being funded for a total of $9 million. We will all see the results of ASHRAE Research.

A donation to ASHRAE Research is not just a contribution to a worthy cause, it is an investment in your personal future and the future of the HVAC&R industry. Please make your donation now and it will be fully deductible from your 1998 taxes. Remember that 100% of your contribution will be used for research.



Dennis Thompson "filling in" for Bob Levi at the November meeting. **Thank you Dennis!**

Thank you to the following new Individual Honor Roll participants:

Leo Copper
Steve Taylor

Thanks to the following new Corporate Honor Roll participants:

ESS Engineering
RF MacDonald Co.

Please make you check payable to **ASHRAE Research** and mail to:

Robert Levi
Carrier Corporation
PO Box 23130
Oakland, CA 94623
510/563-5713

If you would rather charge your donation to a credit card, please call Bob Levi to request a donation envelope.

EMPLOYMENT OPPORTUNITIES

Carlson Associates is a 50 year old full service consulting firm located in downtown San Francisco. We are a nationwide firm with offices in 8 cities across the US. We provide Engineering, Architecture, Project Management and Construction Management services. Carlson is a recognized leader in the critical operation facilities such as data processing centers, telecommunications facilities, and digital broadcast stations as well as administrative, banking and retail project types.

The ideal candidate will have 3 to 10 years experience designing telecommunications or other technically challenging facilities, a BSME, knowledge of HVAC, air side and piping, plumbing and fire protection. The candidate will be proficient in AutoCAD release 14, Word and Excel. We are looking for someone who is self-directed and can contribute to the team effort.

Duties include design and layout of the mechanical, HVAC and plumbing systems, coordination of the systems with other disciplines, writing specifications, site evaluations and report writing. The majority of the projects are in Northern California, Oregon and Washington.

Carlson offers a competitive compensation package with a generous bonus program and encourages the professional development of our employees.

Please mail or fax or resume to:
Carlson Associates, Inc.
Attn: Tom Warriner
120 Montgomery St, Suite 900
San Francisco, CA 94104
fax: 415/677-0145

λεφλεργνγινεερινγινχισνεχττοβεαδδεδοηβοψον

MECHANICAL ENGINEER NEEDED!!

Marin County mechanical consulting engineering firm is searching for a highly motivated mechanical engineer who can handle all aspects of HVAC, plumbing and fire sprinkler projects including calculations, design, specifications and construction administration. The applicant should have a minimum of 5 – 10 years of experience. A professional license is a plus. Above average verbal and writing skills are a must.

Our design projects include office building, schools, restaurants, government facilities, telecommunications facilities, hospital, laboratory and retail projects all over the bay area. Extremely competitive salary and benefit packages are available for qualified individuals. This is anticipated to be along term position for the right person.

Interest parties should fax your resume to 415/456-1248 or email to leflreng@sonic.net.

νοωιστηετιμεφοραλλγοοδμεντοχομετοτηεαδιοφ

Mechanical Engineer/Manager

Our success is built on your talent….***Guttman & Blaevoet***, a well established San Francisco firm serving premier architects and building owners, is building our management team. If you are and experienced, client-oriented mechanical engineer looking for exciting projects and leadership opportunities in a supportive, forward-looking environment, we would like to hear from you. Fax 415/512-8784 or email g&b@bg-eng.com. EOE

News from "The *Grapevine*"

The quarterly newsletter distributed by the Redwood Empire Section of the Golden Gate Chapter of ASHRAE

December 2nd meeting will cover Laboratory Fume Hood & Stack Design at Adobe Creek Clubhouse in Petaluma. Seating is very limited. Reservations required!

1998-1998 Officers - Redwood Empire

President – **Phil Russo**
Vice President – **Pat Bailey**
Secretary – **Larry Nelson**
Treasurer – **Paul Irwin**
Board of Governors – **Dave Hofer**
Board of Governors, Photos – **Todd Williams**
Board of Governors, Newsletter, Reception – **Jim Horn**
Membership – **Dan Noone**
Programs, Nominating, Past President – **Mike Scofield**
Raffle Czar – **Robin James**
Roster – **Gary Margadant**
Technical Seminar – **Dennis Reis**

Upcoming Meetings:

March 3rd Low Temperature Supply Air Design – The Intel Santa Clara Installation
Jonesy's Famous Steak House, Napa