

ASHRAE

JANUARY 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  
 370 Brannan Street  
 San Francisco, CA 94107



Richard A Charles  
 C&B Consulting Engineers  
 150 Spear St Ste 500  
 San Francisco CA 94105-1537

# FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XXXV \* NUMBER 4

January, 1996

## Happy New Year

### Meeting NOTICE

**Date:** Thursday, January 4, 1996

**Social Hour:** 5:30 p.m. (Happy hour beverages downstairs, be happy)

**Dinner:** 6:30 p.m.

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

**Cost:** \$27.00

**To Reserve:** Please phone or fax your dinner reservation to **Ben Sun by Monday, January 1**. A fax form is enclosed for your convenience

(415) 398-3833, Ext 234

**Phone:** (415) 433-5311

**FAX:**

Gabbiano's is located near Pier 2, behind the Ferry Building (Clock Tower), 1 block from the Embarcadero BART station.

### January Program

**PROGRAM:** Task/Ambient Conditioning

**SPEAKER:** Fred Bauman, PE, Research Specialist, Center for Environmental Design Research, UC Berkeley

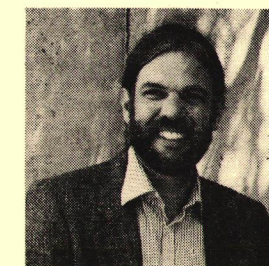
An increasing amount of attention has been paid to air distribution systems that individually condition the immediate environments of the workers within their workstations. Similar to task/ambient lighting systems, these systems offer the occupant control over the speed and direction, and in some cases the temperature, of the incoming air supply. Various called "task/ambient conditioning", "localized thermal distribution", and "personalized air conditioning" systems, these systems provide a unique environment for workers.

Mr. Fred Bauman, PE, is our speaker for the January meeting and he will present and discuss engineering and application guidelines along with recommendations that encourage intelligent design, installation and operation of task/ambient conditioning (TAC) systems in commercial buildings.

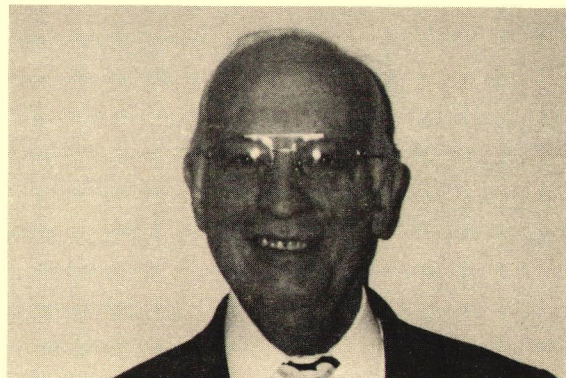
### "The Invisible Battle to Improve Indoor Air Quality"

ASHRAE has announced the speakers for the public session to be held during the 1996 Winter meeting in Atlanta February 17-21.

Steve Taylor, Dr. Don Millar, Dr. Susan Rose and Richard Tyler will take part in the session scheduled for Tuesday, February 20 at the Georgia World Congress Center from 1 to 3 p.m.



Mr. Bauman is an ASHRAE Member and is currently serving as Chair of ASHRAE Technical Committee TC 5.3 (Room Air Distribution) and Chair of ASHRAE Standards Project Committee 113-90R (Method of Testing for Room Air Diffusion)



**PRESIDENT'S MESSAGE**

If you live in the Bay Area during this time of year it is difficult not to be reminded of the Holiday Season. Some think that Christmas has become too commercialized and I somewhat agree. I would like to think, however, that it does bring to mind some of the teachings of our respective religious upbringing.

Several of these teachings are universal to almost all religions and are espoused by the ASHRAE philosophy. Things like quality, honor, trust and service to others are all vertebra in the backbone of most religions, and they fulfill the same function in our Professional Society. It is interesting to see members who have been in the Society for decades. They certainly could not stay in this business as long as they have if these virtues were not an important part of their lives.

I never go to a meeting without feeling that I am

in the presence of some Great People. I don't mean 'great' in the sense that I like them a lot, even though that happens to be the case, but people, who because of their dedication, hard work, honesty and service are thought of as 'great' by their peers.

What about "Peace on Earth?" Within the last few months, Region X has Chartered a brand new chapter in war-torn Lebanon. What better way to establish peace than through an emphasis on our commonality. People dealing with people is the best communication and leads to understanding and peace. What an opportunity we have throughout the world!

To throw a loop around all this, as we would say in Wyoming, I feel that all of you should pat yourselves on the back. In a country where we hear about the shady practices of many people on the 10 o'clock news all the time, I personally have never heard of any "double dealing" in our industry.

During this Holiday time and with the coming of the New Year let me encourage each of you to rededicate yourselves to those attributes which have made our Society strong and have stood you, as an individual, in good stead with those around you.

Happy Holidays and I hope to see you at the January meeting.

Roy Gifford

**NEWS From Your ASHRAE Society**

**New Lab Fume Hood Standard Book Published**  
When working with dangerous materials, laboratory fume hoods are the workers first line of defense against exposure to harmful airborne particulates and fumes. Consequently, ensuring the adequate design and operation of these fume hoods commands a high priority in laboratories.

To address this need, ASHRAE has published a newly revised standard, ASHRAE Standard 110-95, *Method of Testing Performance of Laboratory Fume Hoods*, and a compilation of 20 papers presented at ASHRAE meetings, *Laboratory HVAC. Antithesis*

####

**New ASHRAE Guide To Turn Waste Heat into Energy Saving**

A byproduct of many heating processes is steam, which often is disposed of by venting to the atmosphere. As it dissipates, so does a valuable opportunity to use the energy in the steam. Indirect-fired heat absorption machines offer an economic use for that heat energy, by recovering it from a heat process or a heat cycle machine and using it to power a cooling or refrigerating system.

*Recovered Heat*, published by ASHRAE explains how to properly incorporate absorption technology into a wide range of applications, including central plant cooling, and industrial uses where recoverable heat is available. In addition, the Guide contains a computer program that automates the application procedure, simplifying the initial selection and economics for a potential project.

####

**ASHRAE Seeks Members for Residential Building Standard**

ASHRAE is seeking members for a committee that will prepare a code-language version of its standard on energy conservation in residential buildings. New committee members are sought to review and revise *ANSI/ASHRAE Standard 90.2-1993, Energy Efficient Design of New Low-Rise Residential Buildings*.

Contact ASHRAE for further information on these items

**San Francisco Bay Area  
Engineering Council  
Presents  
1996 ENGINEER'S WEEK BANQUET  
Thursday, February 22  
Hotel Nikko  
\*\*\*\*  
Presentation of 1996 Eminent Engineer by Tau Beta Pi  
Keynote Speaker: Seth Shostak, Ph.D., SETI Institute  
"In Search of Extraterrestrials"  
Presentation of SFBAEC Scholarships to Bay Area  
High School Seniors  
  
Contact: Ralph Johnson  
County of Alameda, Public Works Agency  
Phone: (510) 670-5562**

**Future Programs at ASHRAE Golden Gate Chapter**

Date	Theme	Program	Speaker
Feb 1	Environmental Quality	T.B. Isolation Design	Jim Dunham
Mar 7	Membership Refrigeration	Pre-conditioned Air Systems	Louis Lombardi
Apr 4	Local Students Scholarship	Product Show	
May 6	Field Trip	To be announced	
June 6	Spouse Night/Awards	Something special	

**Fog Dispenser Deadlines**  
The 12th of the month preceding the meeting.  
All the news that fits gets printed.  
-----  
MAIL, FAX or PHONE NEWS TO:  
**FOG DISPENSER**  
Frank Mayhew, Editor  
EC/TC Consulting  
3160 Hicks Road  
Sebastopol, CA 95472  
Telephone (707) 824-9381  
FAX (707) 824-9382  
Photojournalism Editor: Mike Scofield  
Quality Control(Proof reader): Kinnie Scofield

**DO YOU KNOW A PROSPECTIVE NEW MEMBER, or have an address change?**  
-----  
**Contact Membership Chair:**  
John Small (408) 866-0723  
FAX (408) 866-5899  
  
**Not Getting Your Fog Dispenser? Call John Small...**  
  
**Not Listed in the Roster properly? Had a change of address or heard since the last roster? Contact Rachel Murray.**

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 Brannan Street, San Francisco, CA 94107**

**1995 --1996 OFFICERS**  
Roy Gifford .....President  
Dennis Thompson.....President-Elect  
Dan Reiter..... Secretary  
Ernie French.....Treasurer  
**Board of Governors**  
Ben Sun - Mark Hydeman - Gail Brager

ASHRAE GOLDEN GATE CHAPTER 1995-1996 COMMITTEES AND CHAIRPERSONS			
Attendance.....	Richard Charles	Awards.....	Barbara Dilts
BAEC.....	Tom Reinarts	By-Laws.....	Dick Charles
CRC Action.....	Dennis Thompson	Education.....	Jim Brugger
Fog Dispenser.....	Frank Mayhew	Golf.....	Dennis Thompson
Historian.....	Hank Mouw	Honor Roll.....	Ellen Pierce
Membership.....	John Small	Product Show.....	Joe Olivier
Program.....	Dennis Thompson	Publicity.....	Mike Scofield
Refrigeration.....	Jim Davis	Research.....	Mike Morehead
Scholarship.....	Matt McMahon	Seminar.....	Ron Bush
Database Manager.....	Rachel Murray	1998 ASHRAE Winter Meeting.....	tba

**Thought for the Holidays**  
*It's a fine line between  
three wise men and three wise guys.*



This cartoon was submitted by Mike Scofield who is the antithesis of a technoweenie!

ASHRAE GOLDEN GATE CHAPTER  
DINNER RESERVATION FAX

For ~~THURSDAY, November 2, 1995~~

Please send Fax by noon on Monday, October 30

FAX TO: Ben Sun - Flack + Kurtz

FAX: (415)-433-5311 Please call if you have any last minute changes in plans.

Phone: (415)-398-3833, Ext 234 Please cancel your reservation if you cannot attend the meeting.

FROM: DICK CHARLES

COMPANY: C&B ENGINEERS

PHONE: 442-0110

Please make 2 reservation(s) for the following people (fill in names below):

DICK CHARLES

PAUL O'NEIL

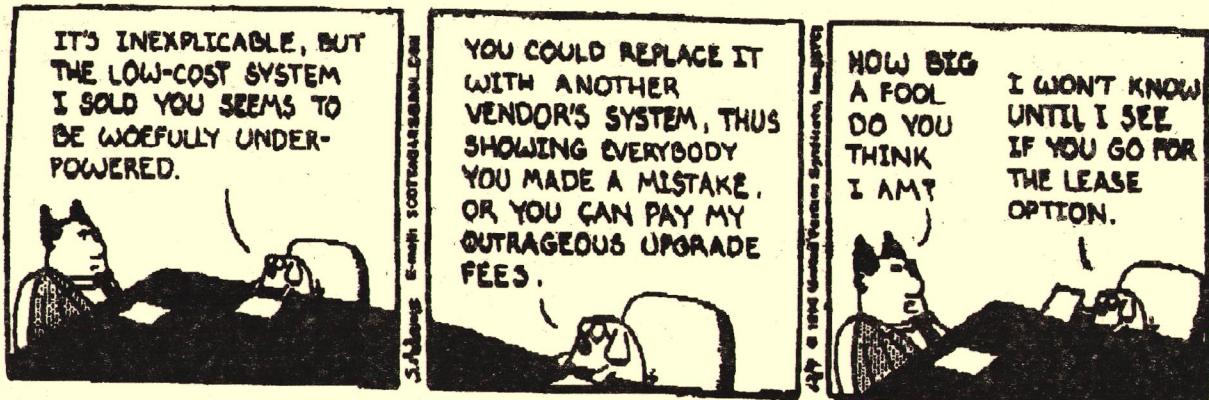
LOCATION: Gabbiano's (upstairs) 1 Ferry Plaza San Francisco, CA (415) 391-8403

Gabbiano's is located near Pier 2, behind the Ferry Building (Clock Tower), 1 block from the Embarcadero BART station. Limited parking is available along the Embarcadero. Valet parking is also available for \$4.25.

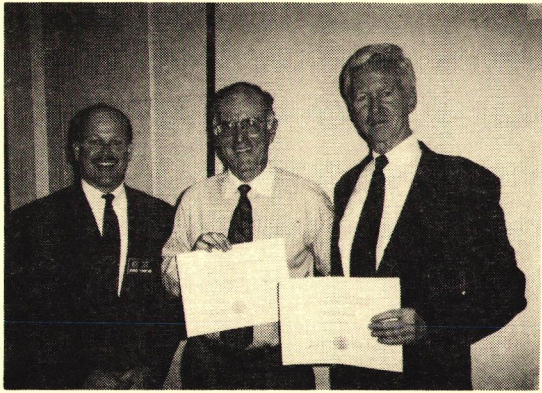
(Edward Scissor Hands would cut along this line, He likes to cut his big phone bills)

Super salesman Jim Nemechek finds a new way to increase his order size.

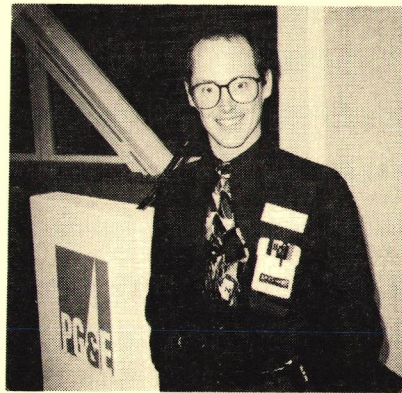
© 1995 Scott Adams



DECEMBER 7, 1995 ASHRAE DINNER MEETING



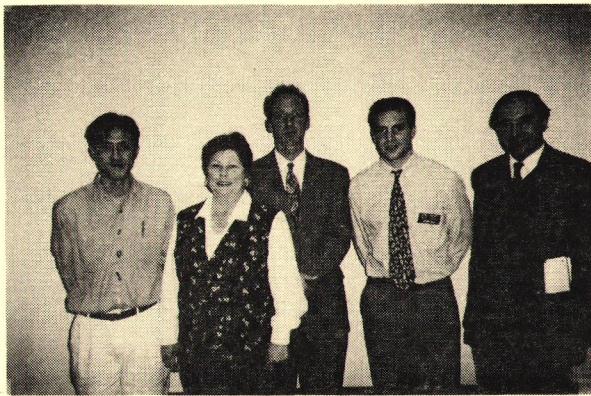
ASHRAE "Lifers" Jerry Yaffee (center) and Dave Dixon (right)



"Dilbert" brings the message



Linford's Dynamic Duo



New Members (L-R): Joe Quach, Ginny Gifford, Steve Kromer, Wayne Gaw, Alex Lekov



HVAC&R Fast Food Line



The Happy Holidays Corral . . . or is that Chorale??

**University of California Berkeley Extension  
Certificate Program In HVAC & R  
Refrigeration and Temperature Controls  
Classes to be offered in February, 1996**

**HVAC Piping Systems Design.... February 6, 1996  
X474 (2 semester units, 30 hours)**

*An elective course in the HVAC-R certificate program.*

This is a practical course for engineers, designers, and contractors on the design and installation of piped HVAC systems. It begins with an examination of piping materials and equipment, structural requirements, installation practices, and the codes and standards affecting design and installation. Design considerations are then discussed in detail for specific piping systems, including: chilled and condenser water, heating water, steam and condensate return and large site distribution systems.

Lecturer: **William Brown**, B.S., P.E., is President of W. R. Brown Associates in Pleasanton.

- 12 evenings
- February 6 to April 30: Tuesday, 6:30-9 p.m. (No meeting April 9)
- Fremont: Room 100, J.F. Kennedy High School, 39999 Blacow Road \$325 (EDP 313437)

**Air Conditioning and Heating Psychrometry and Load Calculations..... February 13, 1996  
X469 (2 semester units, 30 hours)**

*A required course in the HVAC-R certificate program.*

The first course in the HVAC-R series provides a working knowledge of the physical principals and methods of measurement basic to psychrometric processes in air conditioning and heating systems. This course covers the thermodynamics of air-vapor mixtures; the development of psychrometric tables, charts and graphs; the calculation of cooling and heating loads; and the psychrometric processes of equipment for cooling, heating, humidification, dehumidification, and air stream mixture. Topics are approached from an energy utilization viewpoint, with reference to the latest energy codes and standards.

Lecturer: **Robert H Braun** B.S.M.E, P.E., is Principal, Robert H. Braun and Associates, Consulting Engineers, San Francisco.

- 12 evenings
- February 13 to April 30: Tuesday, 7-9:30 p.m. San Francisco: Room 9, UC Extension Downtown Center, 150 Fourth street at Howard.
- \$325 (EDP 313239)

**HVAC Design: Equipment and Distribution Systems.....February 8, 1996  
X470 (2 semester units, 30 hours)**

*A required course in the HVAC-R certificate program.*

This course presents the engineering fundamentals and practical considerations for the design of components and layout of HVAC systems and equipment. It is a practical course that outlines the design process for all major HVAC components commonly in use. Lectures cover the selection and specification of components such as fans, coils, filters, pumps, chillers, cooling towers, boilers, water heaters, terminal devices, and air outlets. The design of air and water distribution systems is outlined with consideration for first cost, energy costs, and other practical matters such as space and maintenance. Energy conservation measures are highlighted throughout the course and presented with consideration for energy codes, utility rebate programs and economic evaluation. Emphasis is on commercial applications in the greater Bay Area.

Lecturer: **Steven T. Taylor** M.S., P.E., is President of Taylor Engineering in Oakland.

- 12 evenings
- February 8 to April 25: Thursday, 7-9:30 p.m.
- San Ramon: Room B4, UC Extension Contra Costa Center, 2272 Camino Ramon.
- \$325 (EDP 313205)

Call UC Berkeley Extension (510) 642-4151 to enroll or obtain course information.

Training for Nonresidential Title 24 to be held in San Francisco in May, 1996 at the Pacific Gas & Electric Energy Center.

**Envelope Module--May 28th  
Lighting Module--May 29th  
Mechanical Module--May 30th**

**LEAD MECHANICAL ENGINEER  
PROJECT ENGINEER**

Affiliated Engineers is a mechanical/electrical/piping consulting firm with offices and projects located throughout the nation. We have an opening in our Walnut Creek office for a degreed and registered mechanical engineer with a minimum of 7 years experience. Central Utility Plant and/or laboratory systems design experience required. EOE. Send resume to:

**Affiliated Engineers  
1646 N. California Blvd., Suite 210  
Walnut Creek, CA 94596**

**MINUTES December 7, 1995**

Meeting called to order at 7:25 PM, by Vice-President Dennis Thompson.

November meeting minutes were approved.

**ANNOUNCEMENTS**

Flyers were on the tables regarding "Doors of Opportunity--Career Options in HVAC" Members can visit colleges to discuss HVAC careers. Also on the tables was the 1996 Technical Seminar survey, requesting input for the topic of the seminar.

Other announcements included Engineers Week coming February 18-25, 1996.

**John Small** reminded everyone that he is the Membership Chair and ready to work for you. The roster deadline is here.

**Matt McMahon**, the Scholarship Chair, solicited donations to the Golden Gate Chapter Fund and the Eric Thor Andresen Memorial Fund. He also announced this year's travel grant applications are available through him. Please help let students know.

**Ron Bush** talked about the 1996 technical seminar.

**Rachel Murray** reminded the members that we now collect dues through the National ASHRAE organization. If you have not paid National ASHRAE you will have to pay John Small, Membership Chair. Also, it is up to the individual to make sure that your name and other information is current in the Chapter database.

Dennis recognized, with certificates of appreciation, Committee Chairs **Frank Mayhew-Fog Dispenser**, and **Wazil Popov-Badges**.

Dennis presented Life Member Certificates to **Gerry Yaffee** and **Dave Dixon**.

Companies with the most members in attendance were: **ACCO (6)**, **Keller & Gannon (6)**, **Engineered Air (6)**. Companies with 100% of their company attending were: **Steve Taylor (1)**, **Carl Jordan (1)**.

The raffle was held. **Gerry Yaffee** won Warrior Tickets, donated by **Vibrex**. **Joe Olivier** won golf balls and a sports bag donated by **B&G Cal Hydronics**.

**Mark Hydeman** spoke on the Chiller Plant spreadsheet he developed and how it can be used

to compare the energy consumption of various chiller combinations.

Meeting was adjourned at 9:00 p.m.

Respectfully Submitted,  
Dan Reiter  
1995-1996 Chapter Secretary

**The MARBLE DRAW**

Last months marble game was again a success in raising funds for ASHRAE Research. \$237 of tickets were sold. Our next pot will be worth

**over \$300**

Prizes last month were donated by:

**Dave Ferreira, ACCO, Inc.**  
**Peter Mistretta, M.W. Sausse**  
**Jim Freuh, California Hydraulics**

**ASPE Courses Available**

Starting in January, courses in Engineered Plumbing System Design will be offered at San Francisco City College. These courses are sponsored by the San Francisco Chapter of ASPE and receive full college credit from CCSF.

The next course to be offered is **ET 139 C**. It will cover:

Analysis of engineering principals of fluid mechanics, as applied to basic plumbing systems. Topics include properties of fluids, piping friction losses, viscosity, Bernoulli's equation, Reynold's Number, open-channel flow, series and parallel piping, pressure on submerged surfaces, buoyancy and pumping problems.

There are a total of three courses, one semester each. Upon completion of all three you will receive a certificate of completion from CCSF and ASPE.

Classes are offered Thursday evenings from 7 to 10 p.m.

Next class starts in mid January at San Francisco City College. Contact CCSF for enrollment information.



ASHRAE

### FEBRUARY HONOR ROLL

# AF/C

REPRESENTATIVES FOR HVAC EQUIPMENT

**BOB SWEZEY  
JACK HIATT  
SCOTT MOYER**

**JIM NEMECHEK  
MATT GOFF  
ADANIA McMAHON**

AIR FILTER / CONTROL 1023 CHESTNUT ST. REDWOOD CITY, CA 94063  
PHONE: (415) 367-8310 FAX: (415) 361-8403



Golden Gate Chapter  
ASHRAE  
370 Brannan Street  
San Francisco, CA 94107



RECEIVED  
JAN 24 1996

CHARLES & BRAUN



Richard A Charles  
C&B Consulting Engineers  
150 Spear St Ste 500  
San Francisco CA 94105-1537

# FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XXXV \* NUMBER 5

February, 1996

#### Meeting Notice

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**Social Hour:** 5:30 p.m. (Happy hour beverages downstairs, be happy)  
**Dinner:** 6:30 p.m.  
**Location:** Gabbiano's (upstairs)  
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**Phone:** (415) 398-3833, Ext. 234  
**FAX:** (415) 433-5311

Gabbiano's is located near Pier 2, behind the Ferry Building (Clock Tower), 1 block from the Embarcadero BART station.

#### February Program

**PROGRAM:** Engineering for Tuberculosis Control

**SPEAKER:** Jim Dunham, MS, PE, Principal Engineer, Francis J. Curry National Tuberculosis Center

In 1985, tuberculosis in the United States reversed a long downward trend and began increasing. California has been particularly hard-hit by the increase, reporting 20 percent of the cases, with only 12 percent of the U. S. population. Tuberculosis is nearly always spread by airborne transmission. HVAC systems can play a significant role in preventing transmission. The major guidelines and regulations for engineering controls related to tuberculosis were updated in 1994. Mr. Jim Dunham, PE, is our speaker for the February meeting. He will discuss the role of HVAC systems in the control of tuberculosis with emphasis on isolation room applications.

Mr. Dunham is an ASHRAE member. He has engineering degrees from Rennselaer Polytechnic and U. C. Berkeley and holds four patents. He provides on-site consultations for facilities which are at high risk for tuberculosis transmission and trains staff involved in the control of tuberculosis. His position is funded by a grant from the US Department of Health and Human Services for Diseases Control and Prevention.

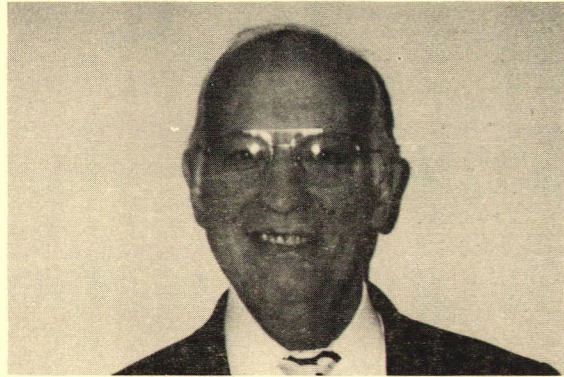
Photo  
Not  
Available

#### NEW MEMBERS

*The Golden Gate ASHRAE Chapter welcomes the following new members:*

Virginia Gifford.....Controlco  
Alexander Lekov.....Xenergy  
Tracy Cornish.....Bosek Gibson & Associates  
Jan Hammarland.....Environmental Filter  
Yalek Ho.....

How about one of your associates name here?  
Call **John Small**, Membership (408) 866-0723



**PRESIDENT'S MESSAGE**

The captain of a US Battleship was awakened. "Approaching lights," said the officer on the deck. The Captain ordered the message sent, "Alter your course 10 degrees." The message came back "Alter your course 10 degrees." The Captain was upset and sent the message, "This is Captain John T. Jackson of the U.S. Navy. Alter your course 10 degrees." The message came back, "This is Seaman 4th Class Philip A. Taylor of the U.S. Coast Guard. Alter your course 10 degrees." Now the Captain was really angry. "This is a US Warship. Alter your course 10 degrees." The message came back. "This is a light house. Alter your course 10 degrees."

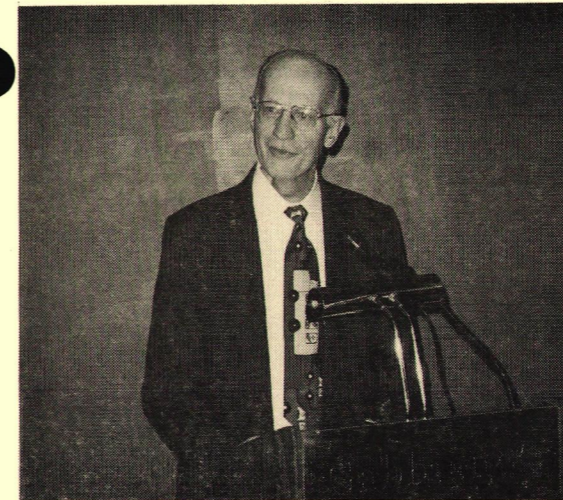
We don't always know what we just know we know! When our company restored the historic Place Hotel, we found a mysterious rack of six pipes running around the perimeter of the interstitial space between the Garden Court's

famous stained glass ceiling and the skylight that protects it. A search of the ancient drawings revealed that this was a steam heating system to melt the snow off the skylight to keep it from failing due to the snow load! The back-eas engineer knew that he just knew what he knew! Snow in San Francisco is terrible!

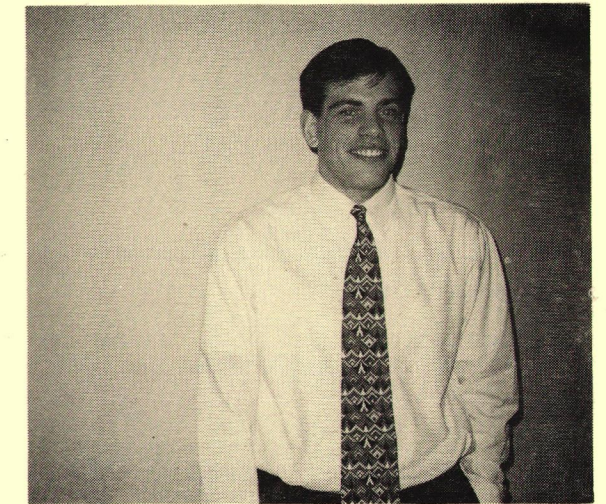
Another example: 20 years ago the domestic hot water recirculating system designed by the consulting firm that I worked for wasn't working. In a meeting the owner asked the plumbing contractor a simple question: "Did you install the system according to the plans?" The contractor said, "Well, no, but it was all wrong!" The owner said, "Maybe if you had followed the drawings, the system would be working." The contractor stood up, reached across the table and punched the owner right in the nose, knocking him out of his chair. The owner got up and the plumbing contractor knocked him down again. The contractor knew that he just knew what he knew! The system would not work as designed and his would!

"What do we learn from this?" asked the Wyoming school "marm". Some times we don't always know what we know, and we allow our pride to interfere with our learning. Contractors can learn from engineers! Engineers can learn from contractors! And vendors can learn from both! (Lest the vendors get upset: Contractors and engineers can learn from vendors) After all that may be a light house coming at you.

...See you at the February meeting, **Roy Gifford**



**Da Prez**



**New Member Hormoz Janssens**



**Gosh Bill, Don't eat THAT!**



**Luck of the Irish**

**Fog Dispenser Deadlines**

The 12th of the month preceding the meeting.

All the news that fits gets printed.

MAIL, FAX or PHONE NEWS TO:  
**FOG DISPENSER**

Frank Mayhew, *Editor*  
EC/TC Consulting  
3160 Hicks Road  
Sebastopol, CA 95472

Telephone (707) 824-9381  
FAX (707) 824-9382

Photojournalism Editor: Mike Scofield  
Quality Control(Proof reader): Kinnie Scofield

**DO YOU KNOW A PROSPECTIVE NEW MEMBER, or have an address change?**

**Contact Membership Chair:**

John Small (408) 866-0723  
FAX (408) 866-5899

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Dan Reiter..... Secretary  
Ernie French..... Treasurer  
**Board of Governors**  
Ben Sun - Mark Hydeman - Gail Brager

**ASHRAE GOLDEN GATE CHAPTER 1995-1996 COMMITTEES AND CHAIRPERSONS**

Attendance..... Richard Charles	Awards..... Barbara Dilts	Auditing..... Hank Mouw
BAEC..... Tom Reinarts	By-Laws..... Dick Charles	Code..... Bob Voelz
CRC Action..... Dennis Thompson	Education..... Jim Brugger	Energy & Tech..... Mike Morehead
Fog Dispenser..... Frank Mayhew	Golf..... Dennis Thompson	Government Affairs..Jon Wintermeyer
Historian..... Hank Mouw	Honor Roll..... Ellen Pierce	Marble Game..... Edgar de Guzman
Membership..... John Small	Product Show..... Joe Olivier	PAOE..... Gail Brager
Program..... Dennis Thompson	Publicity..... Mike Scofield	Reception..... Wasil Popov
Refrigeration..... Jim Davis	Research..... Mike Morehead	Roster..... Tim Provo
Scholarship..... Matt McMahon	Seminar..... Ron Bush	Tennis..... Rich Leao
Database Manager. Rachel Murray	1998 ASHRAE Winter Meeting..... tba	



**1996 is Under Control**



**We don't have to show NO STINKIN BADGES!**

**ASHRAE Research & Promotion**

Marie Madden announced that this year's Research fund drive will get underway soon. Your support is needed to finance the valuable research that ASHRAE sponsors. The results of this research is used as the basis for the ASHRAE Handbooks that every member of ASHRAE receives. Get your checkbooks out.

**Factoid:** ASHRAE is the only professional society that funds all its research internally. No government funds are used for ASHRAE Research.

**SEEKING ENGINEER/ECONOMIST**

ENERGY research-support consulting firm in Oakland seeks energetic engineer/economist, or related technical degree holder for broad range of energy end-use analysis and technical transfer/communication projects. 1-5 years experience. Mail resume, references, salary requirements to:

**Ms. Saunders**  
501 14th Street #200  
Oakland, CA 94612  
No calls or walk-ins

**LEAD MECHANICAL ENGINEER  
PROJECT ENGINEER**

Affiliated Engineers is a mechanical/electrical/piping consulting firm with offices and projects located throughout the nation. We have an opening in our Walnut Creek office for a degreed and registered mechanical engineer with a minimum of 7 years experience. Central Utility Plant and/or laboratory systems design experience required. EOE. Send resume to:

**Affiliated Engineers**  
1646 N. California Blvd., Suite 210  
Walnut Creek, CA 94596

**1996 ASHRAE Technical Seminar "Liability"  
March 20th 4:00 to 8:00 P.M.****TOPICS**

- New Trends in Tort Law
- Shop Drawings
- Designer Lien
- Mechanics Lien

**PARTIAL LIST OF SPEAKERS:**

**Terry McGill** - V.P. Dealy Renton & Associates, Claims Manager, Contract Analyst  
**Gerald Weisbach** - Natkin, Weisbach, Senior Partner AIA, JD

**LOCATION**

Pacific Gas & Electric Energy Center  
851 Howard Street, San Francisco

**Engineering/Architecture Consulting Firm  
Seeks Creative Mechanical Engineer. 5-10  
Years experience in design of advanced  
technology projects.**

**Equal Opportunity Employer**

Send Resumes to:  
P.O. Box 422430  
San Francisco, CA 94142

**San Francisco Bay Area  
Engineering Council**

Presents

**1996 ENGINEER'S WEEK BANQUET**

**Thursday, February 22**

**Hotel Nikko**

\*\*\*\*

**Presentation of 1996 Eminent Engineer by Tau Beta Pi**

**Keynote Speaker: Seth Shostak, Ph.D., SETI Institute**

**"In Search of Extraterrestrials"**

**Presentation of SFBAEC Scholarships to Bay Area**

**High School Seniors**

**Contact: Ralph Johnson**

**County of Alameda, Public Works Agency**

**Phone: (510) 670-5562**

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A national leader in the rapidly growing Energy Services Industry is seeking highly motivated, results-oriented individuals who respond to a challenging career opportunity.

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ME, EE or 2 years equivalent experience evaluating: lighting conservation, variable frequency drives, fuel conversions, and high efficiency electro-technologies. To provide field auditing support to identify and analyze energy conservation opportunities.

**Marketing/Sales Professionals**

Motivated individuals with successful sales experience in Performance Contracting, Utility DSM Programs and Energy Conservation Projects. 5 years experience in energy efficient project sales a must.

Similar Positions in Los Angeles area.

NORESCO offers Medical/Dental, Life/ADD, LTD and 401(k). Forward or FAX resume with cover letter to:

**Noresco, Attention Human Resources,**  
100 Produce Ave., Suite L, South  
San Francisco, CA 94080. FAX (415) 589-3750

MINUTES January 4, 1996

Meeting called to order at 7:20 PM by **President Roy Gifford**.

The minutes of the December meeting were approved as amended to refer to **Dennis Thompson** as President-Elect.

**ANNOUNCEMENTS**

It was announced that the **Golden Gate Scholarship** and **Eric Thor Andressen Scholarship** were being offered again this year. Eligible students should be encouraged to apply.

The Research Promotion night was postponed until next month's meeting.

**Ron Bush** announced the results of his survey of potential seminar topics. Shop Drawings and Liability was the overwhelming victor and will be the subject of this year's seminar. The seminar will be held March 14th at the PG&E Energy Center. More information will be forthcoming.

**Joe Olivier** announced the theme for this year's Product Show as "Product Blunders". Vendors will be encouraged to share the humorous stories that occasionally befall all of us in an imperfect world. The Product Show will be held in conjunction with the April Meeting.

**Ben Sun** announced that 65 people were in attendance for the meeting. He also noted the removal of a number of badges from the racks. If your badge is not present ask **Wasil Popow** to replace yours, or order a new one.

**Tim Provo** stated that he had collected \$1,000 in donations to help support the printing of the roster. Be sure to send Tim your updates if your roster information is different from last year. This year's roster will contain E-mail addresses of those who submit them.

**Dennis Thompson** was recognized as being the newest member of the "Hair Club" for men, with the attractive 'dread locks' he was sporting in the January issue of the highly respected *Fog Dispenser*.

Meeting was adjourned at 9:00 p.m.

Respectfully Submitted, Ernie French

**Future Programs at ASHRAE Golden Gate Chapter**

Date	Theme	Program	Speaker
Mar 7	Membership & Refrigeration	Pre-conditioned Air Systems	Louis Lombardi
Apr 4	Local Students Scholarship	Product Show	
May 6	Field Trip	To be announced	
June 6	Spouse Night/Awards	Something special	

**PRODUCT SHOW TIME  
APRIL 4- PG&E Energy Center  
"Product Blunders"**

This year's Product Show will feature presentations by vendors on how NOT to use their products.

Vendors: Here's your chance to educate and entertain the membership.

Members: Here's your opportunity to avoid embarrassing mistakes.

The Product Show will be held on April 4 before the April meeting. The program will feature presentations by the participants on incorrect uses of their products.

The show will feature table top displays, door prizes, and a contest for the grand prize. To reserve space, or for more information, contact **Joe Olivier** at (510) 426-6811.

ASHRAE has announced the speakers for the public session to be held during the 1996 Winter meeting in Atlanta February 17-21.

**Steve Taylor**, Dr. Don Millar, Dr. Susan Rose and Richard Tyler will take part in the session scheduled for Tuesday, February 20, at the Georgia World Congress Center from 1 to 3 p.m.

The MARBLE DRAW



Who will be the lucky winner of over \$400

Support ASHRAE Scholarship

Last Weeks Prizes Donated by:

Jim Nemechek-- Air Filter Control

Steve Tongl--Trane Company

Training for Nonresidential Title 24 to be held in San Francisco in May, 1996 at the Pacific Gas & Electric Energy Center. Contact Eley & Associates (415)957-1977

**Envelope Module--May 28th**

**Lighting Module--May 29th**

**Mechanical Module--May 30th**

**ASHRAE GOLDEN GATE CHAPTER  
DINNER RESERVATION FAX**

**For THURSDAY, February 1, 1996**

**Please send Fax by noon on Monday, January 29th**

**FAX TO: Ben Sun - Flack + Kurtz**

**FAX: (415)-433-5311** Please call if you have any last minute changes in plans.

**Phone: (415)-398-3833, Ext 234** Please cancel your reservation if you cannot attend the meeting.

<b>FROM:</b> <u>DICK CHARLES</u>	
<b>COMPANY:</b> <u>C&amp;B ENGINEERS</u>	<b>PHONE:</b> <u>442-0110</u>
<b>Please make <u>1</u> reservation(s) for the following people (fill in names below):</b>	
<u>PAUL O'NEIL</u>	_____
_____	_____
_____	_____

**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), 1 block from the Embarcadero BART station. Limited parking is available along the Embarcadero. Valet parking is also available for \$4.25.

(The dotted line below has no social significance whatsoever)

-----



MARCH HONOR ROLL

**Air  
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Corporation**

HVAC Manufacturers Representative

6116 MERCED AVE., #303  
OAKLAND, CA 94611  
PHONE: (510) 655-3990  
FAX: (510) 655-7966

**ABB  
VARIABLE SPEED DRIVES**



DAVID H. EISENBERG, P.E.  
DAN NOONE  
ROY GALE (SACRAMENTO)



Golden Gate Chapter  
ASHRAE  
370 Brannan Street  
San Francisco, CA 94107

# FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XXXV \* NUMBER 6

March, 1996

### Meeting Notice

**Date:** Thursday, March 7, 1996  
**Social Hour:** 5:30 p.m. (Happy hour beverages downstairs, Don't worry-be happy)  
**Dinner:** 6:30 p.m.  
**Location:** Gabbiano's (upstairs)  
1 Ferry Plaza  
San Francisco, CA  
**Cost:** \$27.00  
**To Reserve:** Please phone or fax your dinner reservation to **Ben Sun by Monday, March 4.** A fax form is enclosed for your convenience  
**Phone:** (415) 398-3833, Ext. 234  
**FAX:** (415) 433-5311

Gabbiano's is located near Pier 2, behind the Ferry Building (Clock Tower), 1 block from the Embarcadero BART station.

### NEW LIFE ASSOCIATE MEMBER

*The Golden Gate ASHRAE Chapter  
congratulates*

**Richard Frenzel**

*Rich has been a member for over 30 years  
and is over 65 years of age*

SUPPORT ASHRAE RESEARCH

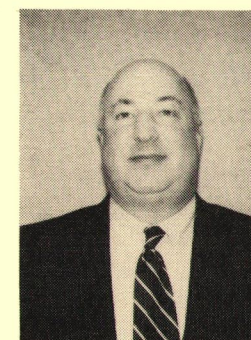
### March Program

**PROGRAM:** Pre-conditioned Air Systems for Support of Commercial Aircraft

**SPEAKER:** Louis S. Lombardi, President  
Aviation Systems, Inc.  
San Rafael, CA

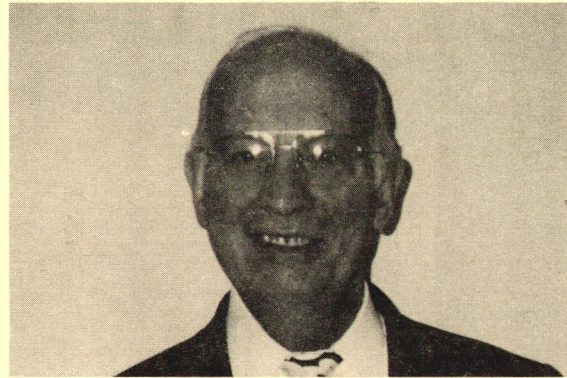
Modern commercial aircraft require air-conditioning both in the air and on the ground. When the aircraft is parked at the terminal, the air-conditioning requirements can be met either by operating an on-board system called an auxiliary power unit (APU) or from external means. Since early 1980, central pre-conditioned air systems have been designed and installed to eliminate the use of the APU, which is costly to operate and environmentally undesirable.

Louis S. Lombardi, President of Aviation Systems, Inc. attended the University of Oregon. Prior to joining Aviation Systems, Inc. in 1991, he was Executive Vice President of McCormick-Morgan, Inc. where he was employed for 29 years. He has been associated with the design and installation of 400 Hertz power systems for over twenty (20) years, and pre-conditioned air systems for over fifteen (15) years.



Mr. Lombardi is the co-author of the *400 Hz Fixed Power System Design Guidebook*. He is a member of SAE and past Chairman of the Aerospace Ground Equipment Group, as well as the American Association of Airport Executives, Airport Consultants Council, Airports Council International-North American and Europe

"How to Win Friends and Influence People" by Dale Carnegie.



**PRESIDENT'S MESSAGE**

Many of you know that I spent three years in Rhodesia, (now Zimbabwe) Africa building a school. Since I worked in a church program similar to the Peace Corps, I frequently took African preacher students out to the villages on the weekend where they could hold services. Once we went into the deep "Bundu" (Zimbabwe's equivalent to Australia's "outback"). After blowing three tires, we hiked for another 15 miles with the Africans carrying our gear on their heads and I my backpack. We had not seen a soul for at least 50 miles, no roads, no houses, no domestic or wild animals, except a few birds. We came upon an outcropping of rock and saw a man reading a book. I found him very interesting, but the most intriguing thing about him was the book he was reading. He was sitting on a rock, in the middle of nowhere, in central Africa, with no people around for miles and he was reading

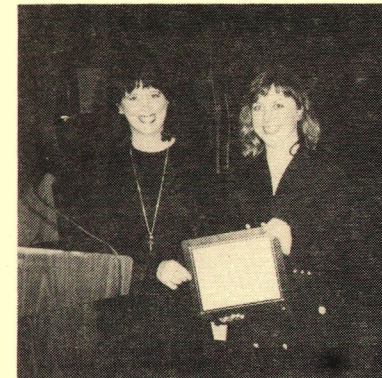
Here was a true optimist! I guess that's why I found him so interesting. He walked with us for the next 6 or 7 miles and told us what he should like to do with his life. He had dreams and hopes and a goal for his life. I thought to myself, "How many people back in the states don't have a goal!" It didn't matter that his goals were perhaps not as high as I thought that they might be. He didn't care about riding in an airplane, or becoming a successful businessman. He wasn't interested in politics, or owning the fanciest car around. He hoped that he would someday be a farmer, find a wife, have children and be able to pay for their schooling.

How often that chance meeting in the middle of Africa, more than 25 years ago has come to mind. It is the basis of my thinking whenever I am involved in setting a goal.

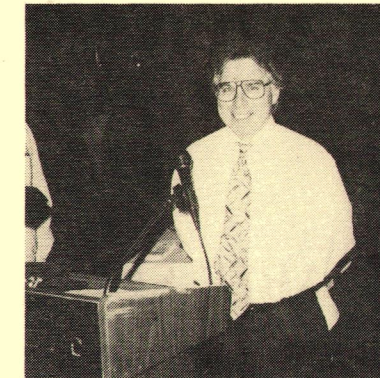
The goal for the Golden Gate Chapter for ASHRAE Research this year is \$33,000. It is within reach. It is certainly no farther away than the goals that young African set for himself. Surely all of us see the value of ASHRAE Research and make enough money to be able to give some of it back to an industry that provides our living. In Wyoming we'd say, "That just makes good horse sense!" Contribute when you get your letter or telephone call!

...See you at the March meeting, Roy Gifford

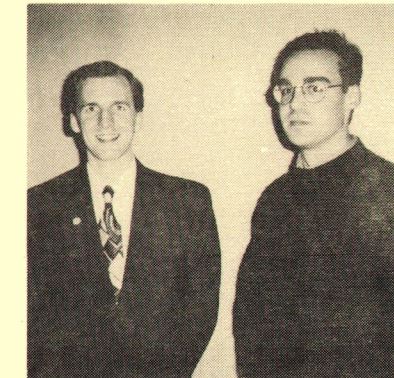
**FEBRUARY 1, 1996 ASHRAE DINNER MEETING**



Research Promotion Chair, Marie (New Mom) Madden, thanks Shannon Welsh (right) for her contribution



Speaker Jim Dunham from the Curry National Tuberculosis Center



New Members Tim McBride (right) and Bill Murray

**Fog Dispenser Deadlines**

The 12th of the month preceding the meeting.

All the news that fits gets printed.

MAIL, FAX or PHONE NEWS TO:  
**FOG DISPENSER**

Frank Mayhew, Editor  
EC/TC Consulting  
3160 Hicks Road  
Sebastopol, CA 95472

Telephone (707) 824-9381  
FAX (707) 824-9382

Photojournalism Editor: Mike Scofield  
Quality Control(Proof reader): Kinnie Scofield

**DO YOU KNOW A PROSPECTIVE NEW MEMBER, or have an address change?**

**Contact Membership Chair:**

John Small (408) 866-0723  
FAX (408) 866-5899

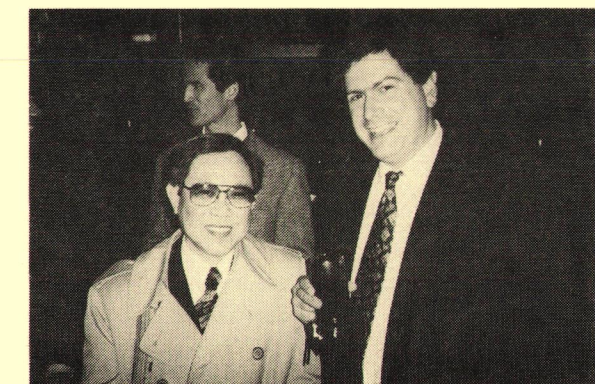
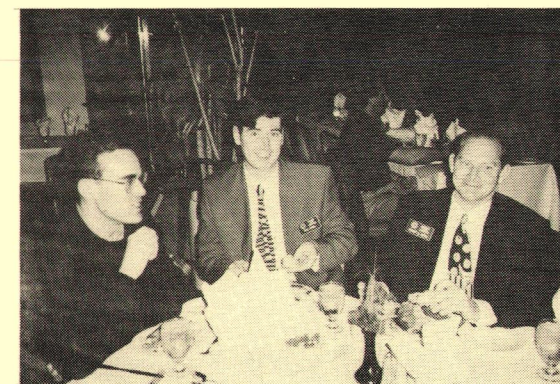
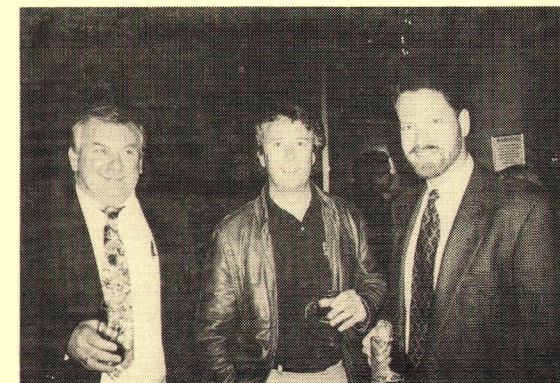
**Not Getting Your Fog Dispenser? Call John Small...**

**Not Listed in the Roster properly? Had a change of address or heart since the last roster? Contact Rachel Murray.**

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 Brannan Street, San Francisco, CA 94107

**1995 --1996 OFFICERS**

Roy Gifford .....President  
Dennis Thompson.....President-Elect  
Dan Reiter..... Secretary  
Ernie French.....Treasurer  
**Board of Governors**  
Ben Sun - Mark Hydeman - Gail Brager



Tuberculosis topic brings out the Best of the Bug Bashers

**ASHRAE GOLDEN GATE CHAPTER 1995-1996 COMMITTEES AND CHAIRPERSONS**

Attendance..... Richard Charles	Awards..... Barbara Dilts	Auditing..... Hank Mouw
BAEC..... Tom Reinarts	By-Laws..... Dick Charles	Code..... Bob Voelz
CRC Action.....Dennis Thompson	Education..... Jim Brugger	Energy & Tech.....Mike Morehead
Fog Dispenser..... Frank Mayhew	Golf..... Dennis Thompson	Government Affairs..Jon Wintermeyer
Historian..... Hank Mouw	Honor Roll..... Ellen Pierce	Marble Game..... Edgar de Guzman
Membership.....John Small	Product Show..... Joe Olivier	PAOE..... Gail Brager
Program.....Dennis Thompson	Publicity..... Mike Scofield	Reception.....Wasil Popov
Refrigeration.....Jim Davis	Research..... Mike Morehead	Roster..... Tim Provo
Scholarship.....Matt McMahon	Seminar..... Ron Bush	Tennis..... Rich Leao
Database Manager. Rachel Murray	1998 ASHRAE Winter Meeting.....tba	

**MINUTES February 1, 1996**

Meeting called to order at 7:20 PM by **President Roy Gifford**.

The minutes of the January meeting were approved.

**ANNOUNCEMENTS**

**Tim Provo** announced we had a 35% increase in roster donations and will probably be able to pay for the roster this year. The roster will be out in February. Please pay attention to paying local dues through Society next year, because your information will now be tracked through Society.

Dennis Thompson presented **Life Associate Member to Dick Frenzel**.

It was announced that the **Golden Gate Scholarship and Eric Thor Andressen Scholarship** were being offered again this year. Eligible students should be encouraged to apply.

Reminder: Engineers Week is February 18-24.

CRC (May 1st-4th) Committee Chairs should try to attend. Motions to Region or Society should be prepared and turned in to the Board.

**Marie Madden** thanked the following Chapter members for donations to ASHRAE Research: **Cal Hydronics, Gaynor Engineers, Flack and Kurtz, Tom Gilbertson, Dick Charles, Norman Wright, Ajmani & Pamidi, Western Plumbing and Heating, Trane Corporation**. Research Committee will be contacting members for donations.

The Board has nominated the following members for the nominating committee: **Barbara Dilts, Dave Eisenberg, Rich Leo, Rich Paillon and Jon Wintermeyer**.

Raffle: Several good bottles of wine (including some from Sonoma County, the very best) were donated by **Norman Wright Equipment Company**. **Ben "Lucky" Sun** drew the black marble, leaving \$411 in the pot for the March meeting.

**Dennis Thompson** introduced the speaker, Jim Dunham, P.E. He spoke on tuberculosis and TB isolation rooms.

Meeting was adjourned at 8:45 p.m.

Respectfully Submitted,  
Dan Reiter

Training for Nonresidential Title 24 to be held in San Francisco in May, 1996 at the Pacific Gas & Electric Energy Center. Contact Eley & Associates (415)957-1977

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**Lighting Module--May 29th**  
**Mechanical Module--May 30th**

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**APRIL 4- PG&E Energy Center**  
**"Product Blunders"**

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The show will feature table top displays, door prizes, and a contest for the grand prize. To reserve space, or for more information, contact Joe Olivier at (510) 426-6811.

The **MARBLE DRAW**



Who will be the lucky winner of over

**\$500**

**Special Sale on Raffle tickets**

**\$1 each or 8 for \$5**

Support ASHRAE Scholarship

Last Weeks Prizes Donated by:

**Sal Giglio -- Norman S. Wright**

**LEAD MECHANICAL ENGINEER**  
**PROJECT ENGINEER**

Affiliated Engineers is a mechanical/electrical/ piping consulting firm with offices and projects located throughout the nation. We have an opening in our Walnut Creek office for a degreed and registered mechanical engineer with a minimum of 7 years experience. Central Utility Plant and/or laboratory systems design experience required. EOE. Send resume to:

**Affiliated Engineers**  
**1646 N. California Blvd., Suite 210**  
**Walnut Creek, CA 94596**

**1996 ASHRAE Technical Seminar "Liability"**  
**March 20th 4:00 to 8:00 P.M.**

**TOPICS**

- New Trends in Tort Law
- Shop Drawings
- Designer Lien
- Mechanics Lien

**PARTIAL LIST OF SPEAKERS:**

**Terry McGill** - V.P. Dealy Renton & Associates, Claims Manager, Contract Analyst

**Gerald Weisbach** - Natkin, Weisbach, Senior Partner AIA, JD

**LOCATION**

Pacific Gas & Electric Energy Center  
 851 Howard Street, San Francisco

**Diagnosing and Mitigating  
 Indoor Air Quality Problems**

A practical "hands on" workshop will be presented by **Francis J. "Bud" Offermann**, PE, CIH. April 22nd & 23rd in San Francisco. This workshop will cover diagnostic procedures and mitigation strategies for solving indoor air quality problems in buildings.

The workshop begins with a review of the important indoor air contaminant source and removal mechanisms in today's buildings followed by a discussion of recommended diagnostic procedures for determining whether there is an existing or potential indoor air quality problem. The seminar then reviews various mitigation strategies which may be implemented for fixing indoor air quality problems. Methods for estimating the benefits and cost contaminant control strategies are discussed.

Contact: Burt Walden, IEE Seminars  
 1448 Pine Street, Suite 103  
 San Francisco, CA 94109  
 Phone:(415) 567-7700

Fee: \$795 (\$695 for ASHRAE, AIHA & BOMA)

**More Indoor Air Quality**

Enclosed in the *Fog Dispenser* this month is a brochure from the University of Tulsa concerning a course they are offering on **IAQ Diagnostics: Hands-On Assessment of Building Ventilation and Pollutant Transport**, April 9th in San Francisco. Should Golden Gate Chapter members wish to attend they need only pay \$150, in lieu of the normal payment of \$250. If you are not going to apply, please pass the brochure on to someone else in your office who might be interested in attending. Complete the form, mail today and breathe easier...

**ENGINEERING CONSULTING FIRM**

seeks HVAC engineer/designer for full-time position. Minimum three years with San Francisco or Oakland consulting or design-build firm and computer literacy required. **Growth Opportunity**

Mail resume and references to:

**MDS Consulting Engineers**  
**375 Fremont St., Suite 250**  
**San Francisco, CA 94105**  
**Phone: (415) 284-0114**

***Restaurant Review***

*First there was the macaroni and cheese with unidentified seafood parts, then the lasagna with melba garlic toast. What's next? Mystery meat with sauce du jour???*

SSM III

**Merger Activity**

Two of the oldest and most prestigious mechanical contractors in California have announced that they are merging their operations. Linford Company and Scott Company of California have merged their design/build capabilities into a Scott Company division under the name of **Linford/Scott**.

**Get Your Speed Fix**

The PG&E Energy Center presents "**Motors, Belts and Variable Frequency Drives**" Tuesday February 27, 1996, 9:00 am to 1:00 pm.

The seminar will address several important components of drive systems energy: energy efficient motors, high efficiency belt systems and variable speed drives. The speakers will address design issues that protect and maintain the performance of high efficiency drive applications operating in the field.

Contact your PG&E representative or the PG&E Energy Center for more information.

**SUPPORT ASHRAE RESEARCH**



## APRIL HONOR ROLL

### TEMPCO Equipment Company, Inc.

100 North Hill Drive, #12 • P.O. Box 400 • Brisbane, CA 94005 • Phone 415 / 467-8680 • Fax: 415 / 468-4159

#### Serving Northern California With A Full Range of HVAC Products

Chillers (5-1100 Ton); Water-Cooled, Air-Cooled and Evaporative-Cooled, Thermal Storage, Air Handling Units; Standard or Customized, Fans: Centrifugal, Propeller, Axial, Roof Exhaust, Rooftop Package Units, 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.

#### Bay Area Sales Staff

\*Chuck Shane, \*Eric Tinglof, \*Doug Herbert, \*Ron Yaffe, \*Dan Barrango, \*Mark Hardin, Andre Shinshiro.  
\*Joel Norgaard, Glynis Tinglof, Brandon Doble and Amanda Aquino.

\*ASHRAE Member



Golden Gate Chapter  
ASHRAE  
370 Brannan Street  
San Francisco, CA 94107

RECEIVED  
MAR 29 1996  
CHARLES & BRAUN



RICHARD A. CHARLES  
CHARLES & BRAUN  
150 SPEAR ST STE 500  
SAN FRANCISCO CA 94105-1537

# FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XXXV \* NUMBER 7

April 1996

#### Meeting Notice

**Date:** Thursday, April 4, 1996

**Pre-Dinner:** 3:00 p.m.  
**ANNUAL PRODUCT SHOW**  
Table Top Displays on the 2nd floor.

**Social Hour:** 5:00 p.m. Happy Hour upstairs among the exhibits. First beverage of the evening will be compliments of the Product Show vendors!

**Dinner:** 6:30 p.m.

**Location:** PG&E Energy Center  
851 Howard St. (Between 4th & 5th)  
San Francisco, CA  
(415) 973-7268

**Cost:** \$27.00

**To Reserve:** Don't be an April Fool, phone or fax your dinner reservation to **Ben Sun by Monday, April 1.**

**Phone:** (415)-398-3833, Ext. 234  
**Fax:** (415) 433-5311

The Center is located 2 blocks south of the Powell St. BART Station. Public Parking is available across the street from the Center or at 5th and Howard.

#### **APRIL IS STUDENTS NIGHT**

We will be encouraging students from local schools to attend. Please share this information with any students you know who might be interested. We will also invite and encourage you to sponsor students (at \$27 each). Please indicate your support on the fax return form.

#### **APRIL PROGRAM**

**PROGRAM:** Product Blunders  
**SPEAKERS:** Product Show Participants

Participants in the Product Show will be making brief 30-second presentations about incorrect application of their products. Following the presentations we will announce winners of the Product Show Contest and award the contest prizes.

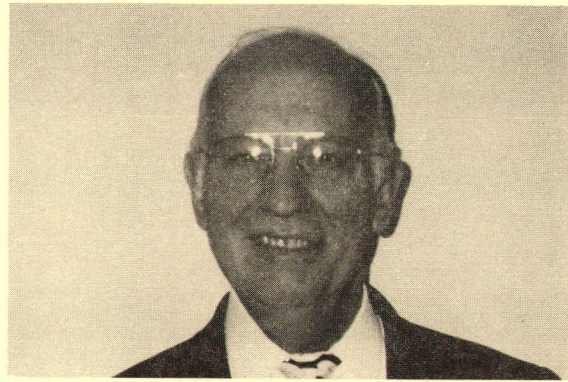
**PRODUCT SHOW CONTEST:** The goal is to assemble clues in the proper sequence to form the winning phrase. (NOTE: you must be registered for the dinner meeting to be eligible to win). When you arrive at the Product Show, pick up a Product Show Contest Card. Each vendor's booth will have a booth number and a clue for the contest. When you visit each table, write the vendor's clue in the corresponding blank on the card. To complete the contest entry, assemble the clues to form the winning phrase. **TURN IN YOUR ENTRY FORM BEFORE DINNER.** Winners will be announced at the end of the after-dinner program.

#### **TO GET MORE INFO ABOUT THE VENDORS.**

When you arrive at the Product Show, pick up a Product Show Information Request Form. If you would like more information about any of the vendor's products or services, simply circle the vendor's booth number, and turn in your card at the designated location. After the show, the vendors you have circled will mail you additional information.

#### **Prizes to be given away at the PRODUCT SHOW:**

1. Pocket Color TV
2. Mini Dictaphone Recorder
3. Miscellaneous Gift Certificates



**PRESIDENT'S MESSAGE**

graze because we could never climb back up on the rock. The only solution was for me to hold onto the reins.

We got off on the rock, took off all our clothes and tied them to the saddle horn, laid down and let that wonderful Wyoming sun warm our backsides. We started to have a small problem. Mac wanted loose to graze and he kept jerking the reins. I held tight and the problem got bigger! Mac jerked harder! I still held tight. The problem kept up until it took a quantum leap when Mac took a bite right out of my butt! I jumped up in pain, started rubbing my rear end, whooping and hollering and dropped the reins! Now the problem was out of control. Mac flew home like Pegasus with our clothes and shoes, and two young boys that didn't solve their small problem had to pay by walking home over the rocky, cactus-covered ground of Wyoming in their birthday suits! We were the laughing stock of my aunts, sister, mother and grandmother. My grandfather just kind of hung his head in shame.

Got a problem with an owner? Solve it now. Is something wrong with the system you designed? Fix it while you can. Is there something wrong with your relationship with someone at work? Talk it over. Don't let your problems bite you on the a--!

.....See you at the April meeting.

**Roy Gifford**

**SUPPORT ASHRAE RESEARCH**

I learned in my youth that if you do not solve a problem as soon as possible, it has a way of biting you on the rear end. This is all because of a sun bath I took.

Picture in your mind two eleven year old ranch kids. That would be my uncle (same age as I am) and me. We were herding my grandfather's sheep about eight miles out of Meeteetse, Wyoming. We rode a tall horse named Mac who did not like to be ridden and who would run back to the barn if you didn't tie him up. One day we came upon a big flat topped rock. It was too tall to climb, but we could step out of the saddle and on to the top. It was a warm sunny spring day so we decided to take a sun bath. We did not dare let the reins go because Mac would bolt for home, and we couldn't tie him up where he could

**Fog Dispenser Deadlines**

The 12th of the month preceding the meeting.

All the news that fits gets printed.

MAIL, FAX or PHONE NEWS TO:  
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Frank Mayhew, Editor

EC/TC Consulting

3160 Hicks Road

Sebastopol, CA 95472

Telephone (707) 824-9381

FAX (707) 824-9382

Photojournalism Editor: Mike Scofield

Quality Control(Proof reader): Kinnie

Scofield

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**Contact Membership Chair:**

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**Board of Governors**

Ben Sun - Mark Hydeman - Gail Brager

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BAEC..... Tom Reinarts

CRC Action.....Dennis Thompson

Fog Dispenser..... Frank Mayhew

Historian..... Hank Mouw

Membership.....John Small

Program.....Dennis Thompson

Refrigeration.....Jim Davis

Scholarship.....Matt McMahon

Database Manager. Rachel Murray

Awards.....Barbara Dilts

By-Laws..... Dick Charles

Education..... Jim Brugger

Golf..... Dennis Thompson

Honor Roll..... Ellen Pierce

Product Show.....Joe Olivier

Publicity..... Mike Scofield

Research.....Mike Morehead

Seminar..... Ron Bush

1998 ASHRAE Winter Meeting..... tba

Auditing..... Hank Mouw

Code.....Bob Voelz

Energy & Tech..... Mike Morehead

Government Affairs..Jon Wintermeyer

Marble Game..... Edgar de Guzman

PAOE..... Gail Brager

Reception.....Wasil Popov

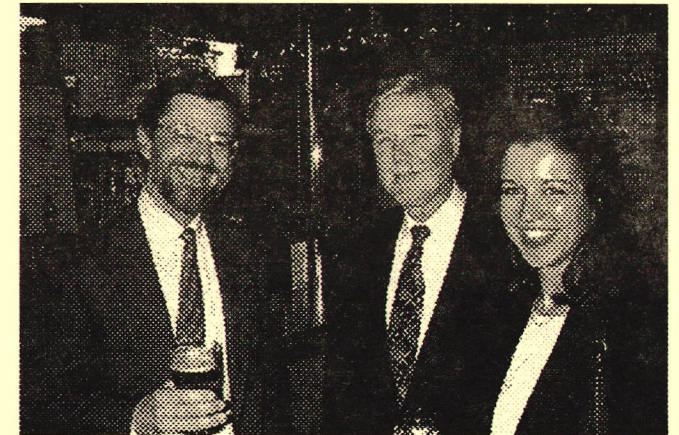
Roster..... Tim Provo

Tennis..... Rich Leao

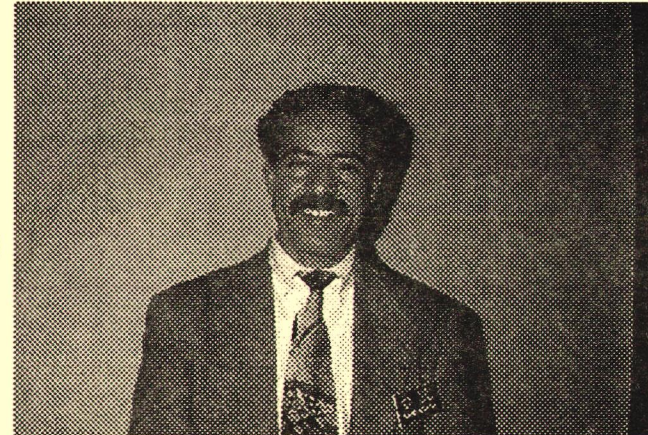
**March 7, 1996 Golden Gate Chapter Meeting**



**Being Happy During Happy Hour**



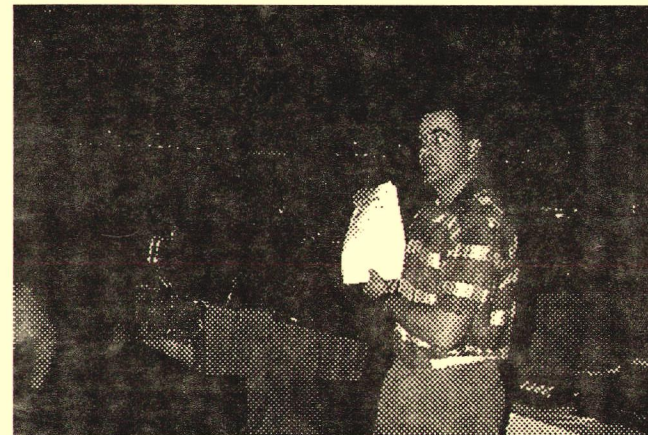
**Czech Checking Out Czechs**



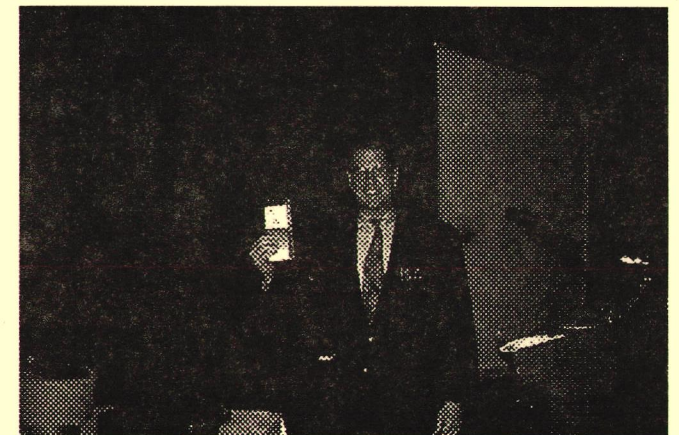
**New Member Brahim Satoutah Smiles for the Camera**



**Ernie French Earnestly Toasts the Coming of Spring**



**The Fashionable Ron Bush Tells All About Upcoming Tech Seminar**



**Joe Olivier Blunders The Announcement of Next Months Product Show "Blunders"**

**MINUTES March 7, 1996**

Meeting called to order at 7:20 PM by **President Roy Gifford**.

The minutes of the February meeting were approved.

During self-introductions it was noted that Ajmani & Pamidi had the highest attendance.

**ANNOUNCEMENTS**

**Dennis Thompson** announced the May Field Trip will be to the SS Jeremiah O'Brien on Thursday, May 2 at 4:45 PM at Pier 32 on the Embarcadero. The tour will cost \$5, dinner will be extra, location to be announced.

**Jon Wintermeyer** announced the Nominating Committee selection of this year's nominees are:

**Dennis Thompson, President**

**Dan Reiter, President-Elect**

**Ernie French, Secretary**

**Ben Sun, Treasurer**

**Mark Hydeman, 2nd Year Board Member**

**Kent Lim, 1st Year Board Member**

**Dick Charles** announced that the Bylaws Committee is close to getting our "non-gender" version approved by ASHRAE Society soon.

**Roy Gifford** requested nominations and motions be submitted at the CRC meeting to be held in May at Lake Tahoe.

**John Small**, Membership Chair, thanked Steve Taylor, Bob Braun and Don Bryant for encouraging students and other new members through their teaching role with the UC Extension Program.

**Roy Gifford** announced the University of Tulsa seminars.

**Roy** requested student sponsors for the next meeting.

**Roy** thanked everyone who helped get the roster out this year, particularly **Tim Provo** and **Rachel Murray**.

**Tim Provo** explained how the database works and how important it is to keep your information correct with Society.

**Joe Olivier** announced the product show at next month's meeting. Vendors should contact Joe soon if they plan to display.

**Ron Bush** announced this year's technical seminar which is on liability and loss prevention. The date is March 20 at 4 PM. The cost is \$40 with pre registration and \$50 at the door.

**Ed DeGuzman** held the raffle. **Dick Frenzel** won the Cook Sweatshirt. **Dick Charles** won the Cook t-shirt. **Barbara Dilts** won the chance to draw the blue marble, and didn't.

All prizes were donated by **Tempco**.

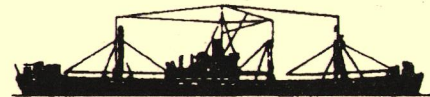
**Dennis** introduced Louis Lombardi of Aviation Systems, who spoke on pre-conditioned air systems for airplanes. The talk was very informative.

Meeting adjourned at 9 PM.

Respectfully Submitted,  
Dan Reiter

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## Preview of the May Meeting



### SS JEREMIAH O'BRIEN

Historical Tour

Thursday May 2, 1996 @ 4:45 PM  
Pier 32 (The Embarcadero @ Brannan)

Dinner at a local bistro to be determined

Cost: \$5.00 per person plus dinner

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## Honors and Awards

At the ASHRAE Winter meeting in Atlanta, **Atma Advani**, P.E., Golden Gate Chapter, was elected to the membership grade of ASHRAE Fellow. This grade recognizes the distinction in the arts and sciences of environmental technology. The honor is earned through achievements as a researcher, designer, educator or engineering executive, and is conferred upon approval by the Society's Honors and Awards Committee and the Board of Directors.

Factoid: Out of 50,000 ASHRAE members there are only 500 ASHRAE Fellows.

## The MARBLE DRAW



Who will be the lucky winner of over

**\$600**

**Special Sale on Raffle tickets**

**1 for \$1**

**5 for \$4**

**8 for \$5**

**20 for \$10**

Support ASHRAE Scholarship  
Last Weeks Prizes Donated by:  
Chuck Shane of Tempco

Training for Nonresidential Title 24 to be held in San Francisco in May, 1996 at the Pacific Gas & Electric Energy Center. Contact Eley & Associates (415)957-1977

**Envelope Module--May 28th**

**Lighting Module--May 29th**

**Mechanical Module--May 30th**

Seminars also to be held in San Diego, Bakersfield, Sacramento, Downey and Fresno

**ENGINEERS, MECHANICAL (PLUMBING and HVAC) - 49 year old Sacramento mechanical engineering firm with staff of 49 seeks SENIOR level PLUMBING DESIGN ENGINEER and HVAC DESIGN ENGINEER. P.E. preferred; specialization in healthcare, educational facilities, government facilities, commercial buildings. Send resume to:**

**Capital Engineering Consultants, Inc.  
7300 Folsom Blvd.  
Sacramento, CA 95826**

### Employment Opportunities

**Many new positions available.** HVAC Controls and HVAC Mechanical positions available now. My client companies are in need of exceptional self-motivated individuals to fill key positions in the Commercial and Industrial Marketplace. General Managers, Project Managers with Design-Build background and Project Managers with controls experience, Project Engineers, Design Engineers, Energy Engineers, Service Sales and Systems Sales. Also looking for P.E.'s and M.E.'s with Construction and/or Contracting background. Competitive salary and benefits. Qualified Candidates contact:

**Julie Amcotts  
HVAC/Energy Search Consultant  
Search West  
(415) 788-1770**

### Diagnosing and Mitigating Indoor Air Quality Problems

A practical "hands on" workshop will be presented by **Francis J. "Bud" Offermann, PE, CIH.** April 22nd & 23rd in San Francisco. This workshop will cover diagnostic procedures and mitigation strategies for solving indoor air quality problems in buildings.

The workshop begins with a review of the important indoor air contaminant source and removal mechanisms in today's buildings followed by a discussion of recommended diagnostic procedures for determining whether there is an existing or potential indoor air quality problem. The seminar then reviews various mitigation strategies which may be implemented for fixing indoor air quality problems. Methods for estimating the benefits and cost-contaminant control strategies are discussed.

Contact: Burt Walden, IEE Seminars  
1448 Pine Street, Suite 103  
San Francisco, CA 94109  
Phone:(415) 567-7700

Fee: \$795 (\$695 for ASHRAE, AIHA & BOMA)

### More Indoor Air Quality

The University of Tulsa is presenting a course on **IAQ Diagnostics: Hands-On Assessment of Building Ventilation and Pollutant Transport.** April 9th in San Francisco. Should Golden Gate Chapter members wish to attend they need only pay \$150, in lieu of the normal fee of \$250. A brochure was included in last months *Fog Dispenser*.

Contact Ms. Barbara Spark at EPA Region 9 (415) 544-1132 for more information.

### WEST COAST RECRUITER

has positions:

- **HVAC Controls Sales and Management**
- **Energy Service Sales**
- **HVAC Applications Engineering**
- **HVAC Mechanical Design**
- **Energy Engineering**
- **HVAC Project Management and Field Technicians**

Mail resume and references to:

**Kirkbride Associates  
915 118th Ave S.E. #370  
Bellevue, WA 98045  
Phone: (206)453-5256  
FAX: (206) 453-5257**

**ASHRAE GOLDEN GATE CHAPTER  
DINNER RESERVATION FAX**

**For THURSDAY, April 4, 1996**

**Please send Fax by noon on Monday, April 1--No Foolin'**

**FAX TO: Ben Sun - Flack + Kurtz**

**FAX: (415)-433-5311** Please call if you have any last minute changes in plans.

**Phone: (415)-398-3833, Ext. 234** Please cancel your reservation if you cannot attend the meeting.

**FROM:** \_\_\_\_\_

**COMPANY:** \_\_\_\_\_ **PHONE:** \_\_\_\_\_

**Please make \_\_\_\_\_ reservation(s) for the following people (fill in names below):**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**LOCATION:** Pacific Gas & Electric Energy Center  
851 Howard Street  
San Francisco

The Center is located 2 blocks south of the Powell St. BART Station. Public Parking is available across the street from the Center. Or down at 5th and Howard.

(Do not, under any circumstances, cut along this line  
sponsor a student and send in your ballot on the backside)

**STUDENT SPONSORSHIP**

***Remember - The April meeting is student night  
Please show your support--Sponsor a Student***

YES, I would like to provide students with the opportunity to attend our meeting.

**I would like to support students for the current meeting.**

I am willing to sponsor \_\_\_\_\_ student(s) at \$27 each.

**I would like to make a long term commitment.**

I am willing to sponsor \_\_\_\_\_ student(s) to attend ASHRAE meetings at \$27 each, up to \_\_\_\_\_ students per meeting, and/or a total of \_\_\_\_\_ students per year.

Signature: \_\_\_\_\_

Company: \_\_\_\_\_ Phone: \_\_\_\_\_

Please **NO** FAX Cover Page

FAX To:  
Gail Brager, ASHRAE  
c/o University of California  
232 Wurster Hall, #1800  
FAX Number: (510) 643-5571

**ASHRAE Golden Gate Chapter - Ballot for 1996-97 Officers**

**AUTOMATIC CHANGE OF POSITIONS: NO VOTE REQUIRED**

<u>Name</u>	<u>Company</u>	<u>Position</u>
Dennis Thompson	Pacific Coast Trane Co.	President
L. L. Roy Gifford	PCL Construction Services	Past-President

**PLEASE CAST YOUR VOTE FOR THE FOLLOWING PEOPLE**  
*Elections are for a 1-year term for 1996-97*

<u>YES</u>	<u>NO</u>	<u>Name</u>	<u>Company</u>	<u>Position</u>
___	___	Dan Reiter	Winzler & Kelly	President-Elect
___	___	Ernie French	Norman Wright Mech. Equip Co.	Secretary
___	___	Ben Sun	Flack+ Kurtz	Treasurer
___	___	Mark Hydeman	Pacific Gas & Electric Co.	Board of Governors 1-year position
___	___	Kent Lim	Kent Man Lim & Company	Board of Governors 2-year position
___	___	Other (write in) _____		

Signature

Print Name

Date

**If you don't FAX, please bring to the April Meeting,  
or return no later than May 15 to our outgoing Past President:**

Gail Brager, ASHRAE  
c/o University of California  
232 Wurster Hall, #1800  
Berkeley, CA 94720-1800



MAY HONOR ROLL



HVAC CONSTRUCTION, SERVICE AND ENGINEERING

Construction: 2850 Poplar Street, Oakland, CA 94608 510-834-2430 FAX 510-834-9413  
Service: 2863 Cypress Street, Oakland, CA 94608 510-834-1082 FAX 510-834-8642

ASHRAE MEMBERS:

Bill Call  
Chip Eskildsen  
Wayne Huie

Bob Linford  
Rob Linford  
Angie Palazzolo

Dave Rifkin  
Steve Sprague  
Val Tatasciore



Golden Gate Chapter  
ASHRAE  
370 Brannan Street  
San Francisco, CA 94107



RICHARD A. CHARLES  
CHARLES & BRAUN  
150 Spear St Ste 500  
San Francisco CA 94105-1537

# FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XXXV \* NUMBER 8

May 1996

Meeting Notice

**Date:** Thursday, May 2, 1996  
**Tour:** 4:45 p.m.  
**The SS Jeremiah O'Brien**  
**Dinner:** Following the tour at Gabbiano's out on the Oyster Patio (weather permitting) bring a jacket...  
**Location:** Pier 32 (The Embarcadero @ Brannan)  
**Cost:** \$5.00 for the tour and \$27.00 for dinner.  
**To Reserve:** Fax your tour and dinner reservation to Ben Sun by Monday, April 29.  
**Phone:** (415)-398-3833, Ext. 234  
**Fax:** (415) 433-5311

## MAY FIELD TRIP



**SS JEREMIAH O'BRIEN  
NATIONAL LIBERTY SHIP  
MEMORIAL  
Historical Tour  
Thursday May 2, 1996 @ 4:45 PM  
Pier 32 (The Embarcadero @  
Brannan)**

This is the last unaltered operating Liberty ship. The *Jeremiah O'Brien* was one of 2,700 built for WWII service. She is a living memorial to the men and women who built, supplied and sailed these ships. She is a veteran of the D-Day Invasion and the Atlantic and Pacific theatres of WWII.

You will be stepping into history. The *Jeremiah O'Brien* will take you back to the days of World War II, and the times of Rosie the Riveter, ration stamps and bell bottomed trousers. This ship is a living symbol of that era.

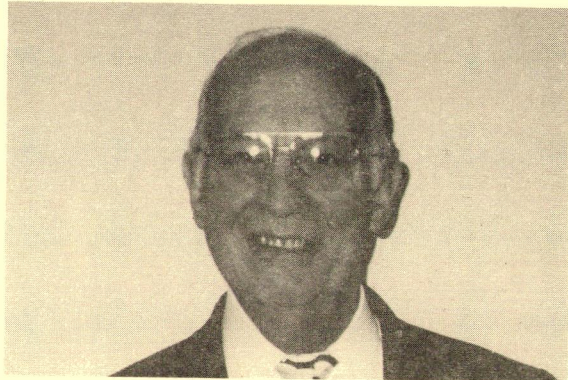
The *Jeremiah O'Brien* has recently returned from a Commemoration Voyage to Normandy, France, upon the occasion of the 50th Anniversary of the Allied Landings on D-Day.

### NEW MEMBERS

The Golden Gate ASHRAE Chapter welcomes the following new members:

Hormoz Janssens.....SH Engineers  
Craig Shulenberg.....ERA  
Brad Yee.....ACCO  
Hui Zhang.....U.C. Berkeley  
Timothy McBride.....The Brose Company  
Thomas Finlayson.....TDF Associate  
Kristopher Kinney.....Lawrence Berkeley Lab  
David Jump.....Student  
Gilbert Loo.....Hanscomb Associates  
Joseph Berg.....Honeywell Inc.  
Iain Anderson.....Hanscomb Associates Inc.  
Gene Gooding..Norman Wright Mechanical Equip.

**Support  
ASHRAE Research**



**PRESIDENT'S MESSAGE**

"Giffords just DON'T do that!" My dad was trying to teach me several things. First, I shouldn't be doing what I was doing! Next, that I had worth because, if for no other reason, I was a Gifford. But, most importantly, there is VALUE in a GOOD NAME. I'm sure most of you, especially the older members, could say, "My dad could borrow money at the bank just on his word!" That's hard to do now because banks have become so impersonal and lots of folks whose name is not their bond have ruined it for the rest, but it doesn't make the concept obsolete.

We live in an age where so many technical breakthroughs are occurring that technology of just a few months ago is obsolete today. Nowhere is this more true than in our own industry unless it might be in our sister industry, computers. The Bay Area is the world leader in change with our fine Universities, the Silicon Valley, and the Financial Centers that are

here, but that does not negate the value of virtues.

I have tried to put a new twist on some of these qualities with old home-spun Wyoming stories and tales of Africa and my youth. It has been fun! I hope you've enjoyed them. The enjoyment and the humor was not my main purpose, however. What I have been trying to emphasize is that a good name IS of value! Honesty IS the best policy! Honor is NOT passe! Your word should STILL be your bond!

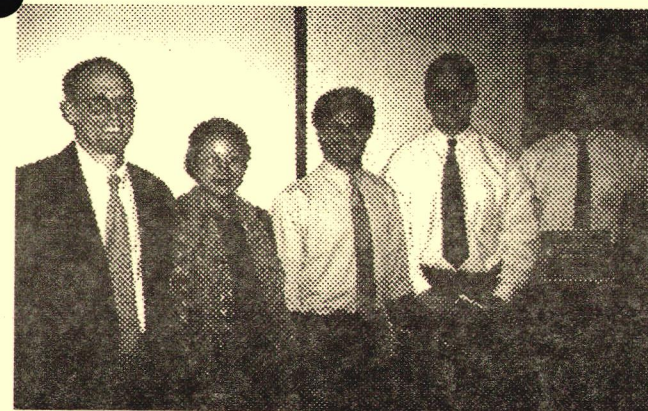
There are very practical applications having to do with our industry. Don't say the drawings (or checks) are in the mail then run to the postage meter and back date it so that it looks like you mailed them out when you said you did!

Young designers and engineers, don't sign your office's registered engineer's name to the tracings. He is supposed to review and approve your work and sign his own name. Believe me, when you are making a deposition it surely feels good to say, "no, sir!" when the lawyer asks, "Did you ever sign Mr. So-and-so's name to any document?"

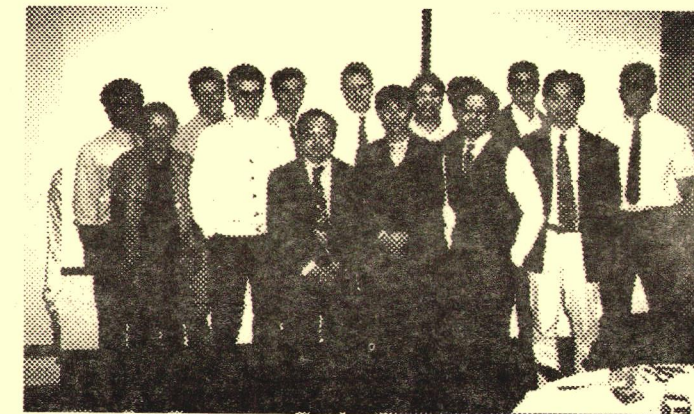
There are hundreds of things that come up in the course of our life where we have to make decisions based on moral values. Wouldn't it be nice if our kids could say, "Dad's and Mom's word was their bond!"?

...See you at the Jeremiah O'Brien,  
**Roy Gifford**

**Apr 4, 1996 Golden Gate Chapter Meeting and Product Show**



Scholarship Chair, Matt McMahon (left) with ASHRAE College Scholarship recipients (left to right) Ms. Zhang Hui, Allan Daly, Kevin Andersen, and Peter Huben.



Fourteen of the local college students that attended the ASHRAE Student night. Mike Scofield will buy dinner for the first person naming all fourteen.



The Bay Area Science Fair Award Recipients (left to right) Julia Mazzetta, Ashley Libbey, Katherine Giebelhausen, Tarashaun Hausner and William Baker.



Rod Kief (right) discusses his grading practices with former students and interested parties during the product show.

**Fog Dispenser Deadlines**

The 12th of the month preceding the meeting.

All the news that fits gets printed.

MAIL, FAX or PHONE NEWS TO:  
**FOG DISPENSER**

Frank Mayhew, Editor  
EC/TC Consulting  
3160 Hicks Road  
Sebastopol, CA 95472

Telephone (707) 824-9381  
FAX (707) 824-9382

Photojournalism Editor: Mike Scofield  
Quality Control(Proof reader): Kinnie Scofield

**DO YOU KNOW A PROSPECTIVE NEW MEMBER, or have an address change?**

**Contact Membership Chair:**

John Small ----- (408) 866-0723  
----- FAX (408) 866-5899

**Not Getting Your Fog Dispenser? Call John Small...**

**Not Listed in the Roster properly? Had a change of address or heart since the last roster? Contact Rachel Murray.**

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 Brannan Street, San Francisco, CA 94107

**1995 --1996 OFFICERS**

Roy Gifford .....President  
Dennis Thompson.....President-Elect  
Dan Reiter..... Secretary  
Ernie French.....Treasurer  
**Board of Governors**  
Ben Sun - Mark Hydeman - Gail Brager

**ASHRAE GOLDEN GATE CHAPTER 1995-1996 COMMITTEES AND CHAIRPERSONS**

Attendance..... Richard Charles	Awards..... Barbara Dilts	Auditing..... Hank Mouw
BAEC..... Tom Reinarts	By-Laws..... Dick Charles	Code..... Bob Voelz
CRC Action.....Dennis Thompson	Education..... Jim Brugger	Energy & Tech..... Mike Morehead
Fog Dispenser..... Frank Mayhew	Golf..... Dennis Thompson	Government Affairs..Jon Wintermeyer
Historian..... Hank Mouw	Honor Roll..... Ellen Pierce	Marble Game..... Edgar de Guzman
Membership..... John Small	Product Show..... Joe Olivier	PAOE..... Gail Brager
Program.....Dennis Thompson	Publicity..... Mike Scofield	Reception..... Wasil Popov
Refrigeration.....Jim Davis	Research..... Mike Morehead	Roster..... Tim Provo
Scholarship..... Matt McMahon	Seminar..... Ron Bush	Tennis..... Rich Leao
Database Manager. Rachel Murray	1998 ASHRAE Winter Meeting..... tba	

**DILBERT SCOTT ADAMS**



Rich Leao gives Mike Rubio the chance to meet quota

## MINUTES April 4, 1996

Meeting called to order by **President Roy Clifford**.

The minutes of the March meeting were approved.

## ANNOUNCEMENTS

**Tim** announced that April is the month to nominate CRC positions and motions.

**Dennis Thompson** announced the May Field Trip will be to the SS Jeremiah O'Brien on Thursday, May 2 at 4:45 PM at Pier 32 on the Embarcadero. The tour will cost \$5, dinner will be extra, at Gabbiano's.

**Roy** announced that the end of April is the deadline for the Chapter election ballots.

The Golf Tournament is on Friday, June 7th at Lincoln Park. Contact **Mike Rubio**.

The Tennis Tournament is on Friday, June 14th.

**Matt McMahon** presented the Travel Grant to UC Berkeley student **Allen Daly** and the Eric Thor Andresen Memorial Scholarship to **Kevin Andersen**, student from San Francisco State.

**Mark Hydeman** presented Science Fair awards for PG&E to **Ashley Libbey** for a presentation that turned garbage into energy; **Julia Mazzetta** for testing coffee cups for insulation effectiveness; **Katherine Giebelhausen** for testing the way color affects solar panel heating.

**Jim Brugger** presented Science Fair awards for ASHRAE to **William Baker** for testing different methods of solar heating with inexpensive materials; **Tarashaun Hausner** for testing small model houses for the effect of window area on heating.

The Science Fair students all spoke a little bit about their projects and were quite interesting (and funny).

**Joe Olivier** held the Product Show raffle and presented great prizes.

Vendors presented thirty second mis-applications of their products.

Meeting adjourned.

Respectfully Submitted,  
Dan Reiter

## The MARBLE DRAW



Who will be the lucky winner of over

**\$700**

**Special Sale on Raffle tickets**

**1 for \$1**

**5 for \$4**

**8 for \$5**

**20 for \$10**

Support ASHRAE Scholarship

Training for Nonresidential Title 24 to be held in San Francisco in May, 1996 at the Pacific Gas & Electric Energy Center. Contact Eley & Associates (415)957-1977

**Envelope Module--May 28th**

**Lighting Module--May 29th**

**Mechanical Module--May 30th**

Seminars also to be held in the beautiful California cities of San Diego, Bakersfield, Sacramento, Downey and Fresno

**LEAD MECHANICAL ENGINEER**

Established San Francisco consulting firm has immediate opening for qualified mechanical engineer. Must have P.E.; 8+ years minimum experience in HVAC, Plumbing and Fire Protection design on a wide range of projects. Ability to be a team leader with CAD, writing and verbal skills. Send resume' and salary history to:

**Design Engineering Services**

**116 New Montgomery Street, Suite 815**

**San Francisco, CA 94105**

**FAX (425) 495-6352**

**POSITION AVAILABLE**

Sales engineer needed for technical HVAC equipment sales. Industry experience necessary. Competitive compensation, excellent benefits and opportunity for personal and financial growth. Contact **Chuck Shane** at **Tempco Equipment Co., Inc. (415) 467-8680**

**ASHRAE GOLDEN GATE CHAPTER  
DINNER and Field Trip RESERVATION FAX  
For Thursday, May 2, 1996**

**Please send Fax by 12 O'Clock High Noon on Monday, April 29, 1996**

**FAX TO: Ben Sun - Flack + Kurtz**

**FAX: (415)-433-5311** Please call if you have any last minute changes in plans.

**Phone: (415)-398-3833, Ext. 234** Please cancel your reservation if you cannot attend the meeting.

**FROM:** \_\_\_\_\_

**COMPANY:** \_\_\_\_\_

**PHONE:** \_\_\_\_\_

Please make \_\_\_\_\_ reservation(s) for the following people (*fill in names below*):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

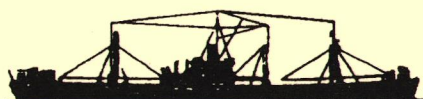
\_\_\_\_\_

LOCATION: The Jeremiah O'Brien...Embarcadero at Brannan Streets in San Francisco

(cut along this line and FAX the top)

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## MAY FIELD TRIP



**SS JEREMIAH O'BRIEN**

**NATIONAL LIBERTY SHIP MEMORIAL**

**Historical Tour**

**Thursday May 2, 1996 @ 4:45 PM**

**Pier 32 (The Embarcadero @ Brannan)**



## HONOR ROLL

### Joseph H. Schauf Co., Inc.

Post Office Box 110069  
Campbell, California 95011-0069  
Phone: 408-866-0723 Fax: 408-866-5899

4221 West Sierra Madre Avenue, Suite 207  
Fresno, California 93722  
Phone: 209-275-6901; Fax: 209-275-6913

#### Manufacturers' Representatives for:

Cooling Towers, Evaporative Condensers,  
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Primary/Secondary Pumping Packages,  
Variable Water Volume, Domestic Water  
Systems, Fire Pump Packages



RICHARD A. CHARLES  
CHARLES & BRAUN  
150 SPEAR ST STE 500  
SAN FRANCISCO CA 94105-1537

# FOG DISPENSER

Golden Gate Chapter



ASHRAE

June 1996

VOLUME XXXV \* NUMBER 9

### Meeting Notice Bring Your Spouse (etc.)

**Date:** Thursday, June 6, 1996  
**Social Hour:** 5:30 p.m. (Happy hour beverages  
downstairs, Don't worry-be happy)  
**Dinner:** 6:30 p.m.  
**Location:** Gabbiano's (upstairs)  
1 Ferry Plaza, San Francisco, CA  
**Cost:** \$27.00  
**To Reserve:** Please phone or fax your dinner  
reservation to **Ben Sun by  
Monday, May 27.** A fax form is  
enclosed for your convenience  
**Phone:** (415) 398-3833, Ext. 234  
**FAX:** (415) 433-5311

Gabbiano's is located near Pier 2, behind the  
Ferry Building (Clock Tower), 1 block from the  
Embarcadero BART station.

### SUPPORT ASHRAE RESEARCH

ASHRAE announced 16 new research projects  
worth \$1,094,994 at its 1996 Winter Meeting in  
Atlanta. Some of the new research will be  
conducted in the following areas:

"Identification and Effectiveness of Current  
Methods Applied and Criteria Applied in Non-  
Routine Cleaning and Decontaminating of Air  
Ducts and Other HVAC Components"

"How Operation and Maintenance Practices Affect  
Indoor Air Quality in Office Buildings"

"Determine the Efficacy of Anti microbial  
Treatments for Fibrous Air Filters"

"Adjacent Building Effects on Laboratory Fume  
Hood Exhaust Stack Design"

### June Program

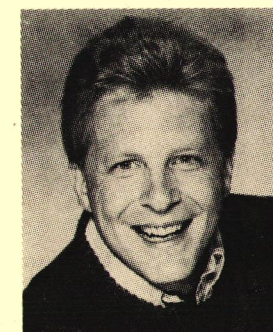
**PROGRAM:** "Governing the Engineering  
Organization", or, "Who the hell  
is in charge here?"

**SPEAKER:** Mr. K. Michael Riley, Principal,  
Center for Organizational  
Management, Engineering and  
Delagatory Yeomen.

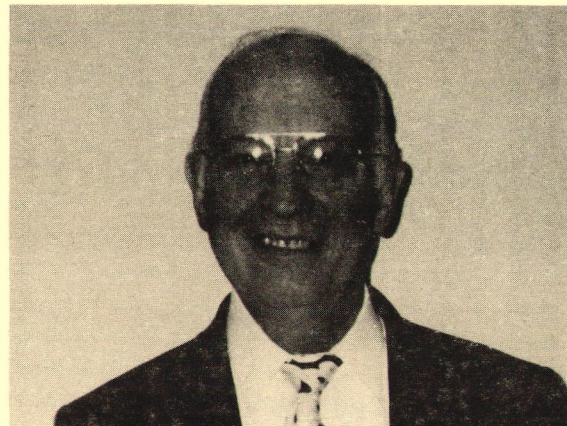
During the past five years, the Golden Gate  
ASHRAE Chapter has experienced a substantial  
change in the individuals operating as Officers  
and the Board of Governors. These members of  
out chapter have worked very hard toward  
creating an enhanced chapter presence at Society  
and Region levels.

Mr. Riley will present an outsider's view of the  
members of our chapter and specifically chapter  
officers and the Board of Governors. His analysis  
of organizational behavior should provide our  
members with a unique perspective of how our  
chapter is operated and the ideals of those  
shaping its destiny.

You can look forward to an evening of interesting  
revelations and insights. In addition we will be  
handing out awards to key individuals within our  
chapter who have helped provide service and  
support for our key activities (or who haven't  
gotten in the way of progress too much).



Mr. Riley is known  
throughout North America  
and Europe as the  
knowledgeable authority on  
organizations based on the  
insights he gained while  
studying the mating habits of  
Peruvian ants in the middle  
of July. He is an eminent  
Herpetologist, Entomologist  
and Cigarologist.



**PRESIDENT'S MESSAGE**

In 1969 I stood on the top of the world! I had successfully climbed Kilimanjaro! Just the name, Kilimanjaro, conjures up visions of its hazy snow capped bulk rising out of the African plain! At 19,340 feet, the highest free-standing mountain in the world, it is breathtaking. It starts out as a slightly darker blue high in the sky. It becomes a little darker as you approach, but doesn't become distinct until you are almost there. Suddenly there it is, a giant of a mountain. I remember thinking, "I'm going to climb that?" Five days later I was standing (not too steadily) on top, taking in the majestic view.

Now in 1996 I am standing on the top of the world again. I have successfully climbed to the top of the Golden Gate Chapter as President. Just the term,

President, conjures up visions of extra work and responsibility! I often think about my climb up Kilimanjaro and compare it to the last six years. When Carl Jordan called to see if I would serve, remember thinking, "I'm going to do all that work?" Six years later I am standing (not too steadily) on the top taking in a retrospective view.

On the side of Kilimanjaro I had to fight the fear that I might fail. After all, I was 35 years old and traveling with some much younger and more athletic friends. Both these things have certainly been true in the climb through the chairs of the chapter. I worked my way up the Board by relying on those friends.

AH! but now I am here!!! I can see the view: magnificent, beautiful and awe inspiring because I realize that this Society functions entirely on the efforts of wonderful people.

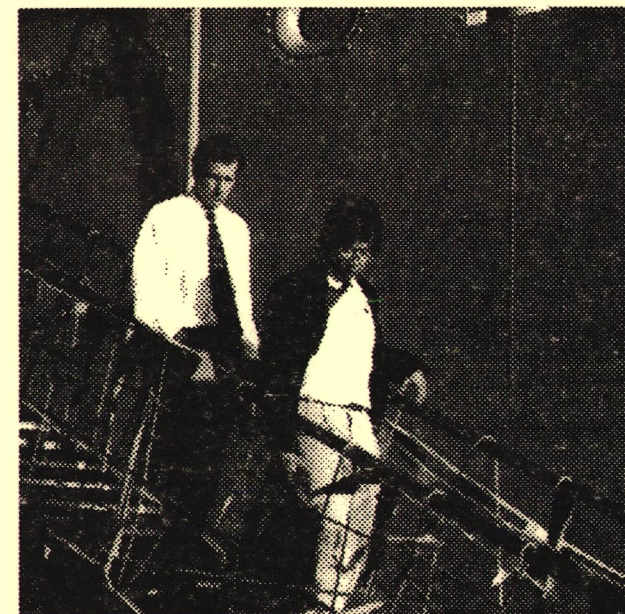
I wish this old Wyoming boy had enough space to thank everyone properly for their help. I don't, but I will thank the present board: Gail, Dennis, Dan, Ernie, Mark and Ben. They've stood by me, especially when I was sick. Past board members, with whom I have served, who have been inspirational are Tom Reinarts, Barbara Dilts, Rich Leao and Rick Paillon. TO all the committee chairs that have served, a great big THANK YOU!

(Continued on next page)

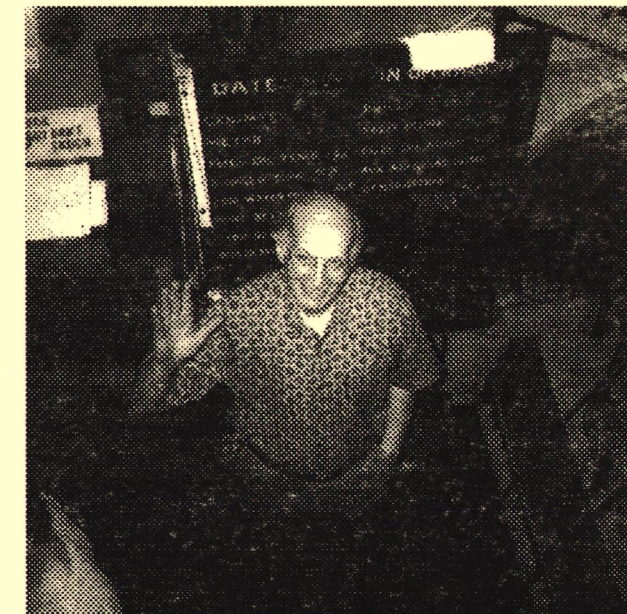
**May 2 1996 Golden Gate Chapter Field Trip**



**SS JEREMIAH O'BRIEN**



Ernie French takes Ben Sun ashore after Ben gets seasick.



Our fearless leader Roy, tells us everything is OK after a small explosion in the engine room.

**Fog Dispenser Deadlines**

The 12th of the month preceding the meeting.

All the news that fits gets printed.

MAIL, FAX or PHONE NEWS TO:  
**FOG DISPENSER**

Frank Mayhew, Editor  
EC/TC Consulting  
3160 Hicks Road  
Sebastopol, CA 95472

Telephone (707) 824-9381  
FAX (707) 824-9382

Photojournalism Editor: Mike Scofield  
Quality Control(Proof reader): Kinnie Scofield

**DO YOU KNOW A PROSPECTIVE NEW MEMBER, or have an address change?**

**Contact Membership Chair:**

John Small ----- (408) 866-0723  
----- FAX (408) 866-5899

**Not Getting Your Fog Dispenser? Call John Small...**

**Not Listed in the Roster properly? Had a change of address or heart since the last roster? Contact Rachel Murray.**

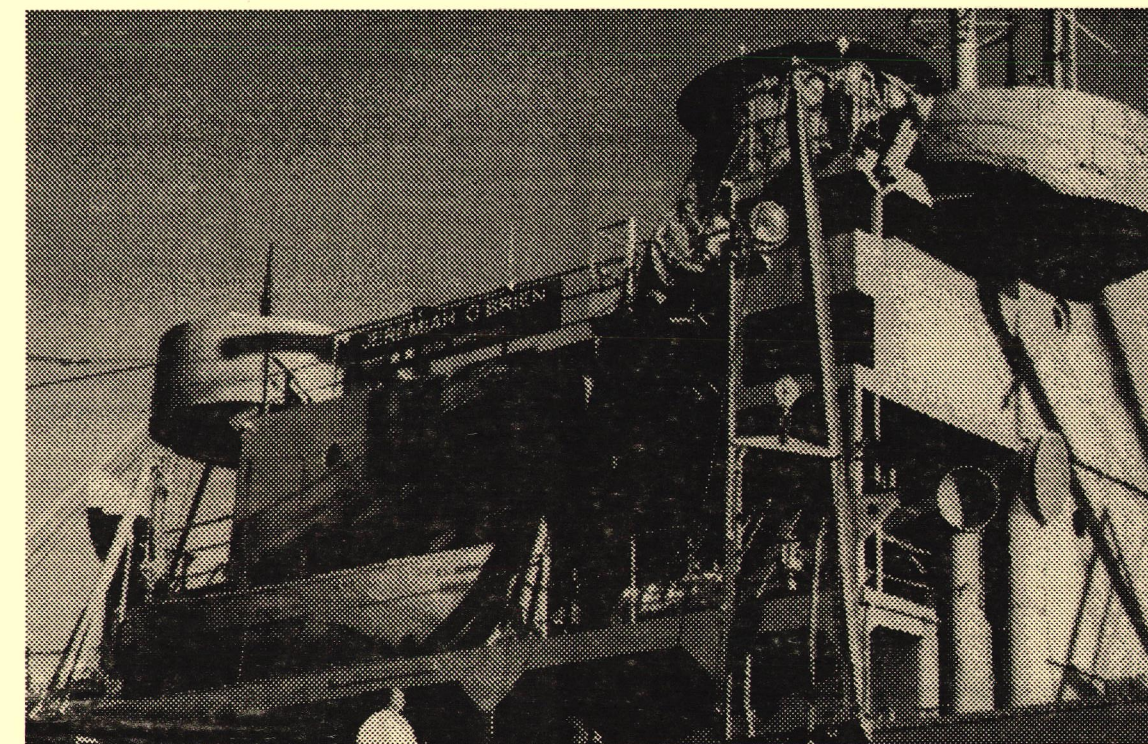
Published monthly, October through June, by the **Golden Gate Chapter of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, c/o Duplicating Associates, 370 Brannan Street, San Francisco, CA 94107**

**1995 --1996 OFFICERS**

Roy Gifford .....President  
Dennis Thompson.....President-Elect  
Dan Reiter..... Secretary  
Ernie French.....Treasurer  
**Board of Governors**  
Ben Sun - Mark Hydeman - Gail Brager

**ASHRAE GOLDEN GATE CHAPTER 1995-1996 COMMITTEES AND CHAIRPERSONS**

Attendance..... Richard Charles	Awards..... Barbara Dilts	Auditing..... Hank Mouw
BAEC..... Tom Reinarts	By-Laws..... Dick Charles	Code..... Bob Voelz
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Fog Dispenser..... Frank Mayhew	Golf..... Dennis Thompson	Government Affairs..Jon Wintermeyer
Historian..... Hank Mouw	Honor Roll..... Ellen Pierce	Marble Game..... Edgar de Guzman
Membership..... John Small	Product Show..... Joe Olivier	PAOE..... Gail Brager
Program..... Dennis Thompson	Publicity..... Mike Scofield	Reception..... Wasil Popov
Refrigeration..... Jim Davis	Research..... Mike Morehead	Roster..... Tim Provo
Scholarship..... Matt McMahon	Seminar..... Ron Bush	Tennis..... Rich Leao
Database Manager. Rachel Murray	1998 ASHRAE Winter Meeting..... tba	



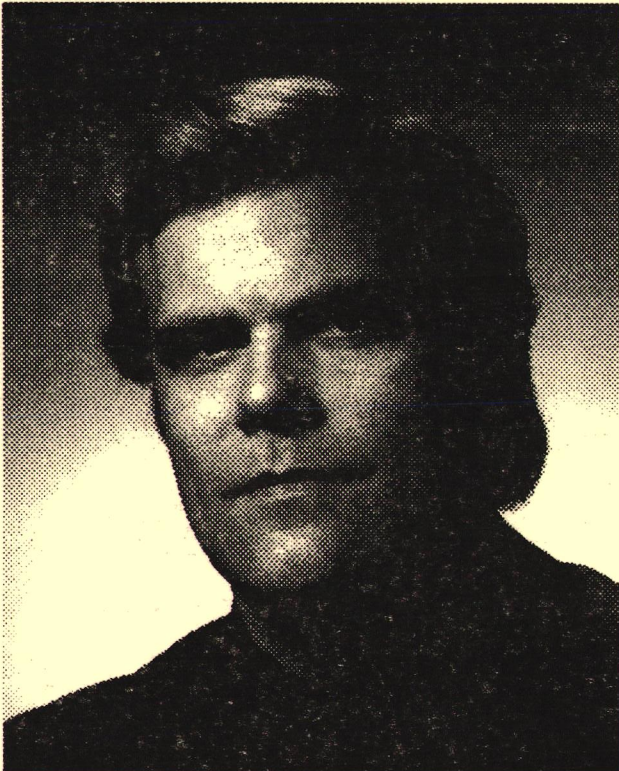
ASHRAE Golden Gaters commandeer the good ship Jeremiah O'Brien. The ship will never be the same again!

## People on the Move

This is a new feature of the *Fog Dispenser*. The old saying is that "you can't tell the players without a program". Our industry is constantly in flux and it is hard to keep up with where everyone is. If you have made a change recently, let us know what's happening we will let our members know.

-----

**Jeff Blaevoet, P.E.** has joined the San Francisco-based consulting engineering firm of **Guttman & MacRitchie** as an Owner and Principal. Jeff lives in Novato, CA with his wife and two children. He joins Guttman & MacRitchie as the firm marks its 40th year in business in San Francisco.



## ACCO Expands to the East Bay

ACCO is pleased to announce the opening of a new office in Concord. The office is located at 2150 John Glenn Drive in Concord near Buchanan Airport. The East Bay ACCO Team includes: **Bill Call**, Regional Manager; **Chip Eskildsen, P.E.**, Project Manager/Engineer; **Wayne Huie**, Project Manager/Engineer; **Leatha Curtis**, Assistant Project Manager; **Leo Abalos**, Engineer; **John Stultz**, Engineer; **Craig Ristow**, Engineer; **Vic Fong**, Sheetmetal Foreman; and **Dave Morehouse**, Piping Foreman.

Training for Nonresidential Title 24 to be held in San Francisco in May, 1996 at the Pacific Gas & Electric Energy Center. Contact Eley & Associates (415)957-1977

**Envelope Module--May 28th**  
**Lighting Module--May 29th**  
**Mechanical Module--May 30th**

Seminars also to be held in San Diego, Bakersfield, Sacramento, Downey and Fresno

**University of California Berkeley Extension**  
**Certificate Program In HVAC & R**  
**Refrigeration Class to be offered in the Summer**

### Refrigeration Concepts

June 3 to August 5, 1996  
 X471 (2 units, 30 hours)  
 70 Evans Hall, UC Berkeley

This course covers theory, application, and equipment of basic refrigeration cycles. Major emphasis is on the vapor compression cycle, including systems components, capacities and selection and sizing of equipment. Cooling loads, control, and piping considerations are included. Energy considerations and alternatives to freons and vapor compression cycles are also discussed.

Lecturer: **James L. Davis**, Consulting Mechanical Engineer.

Call UC Berkeley Extension (510) 642-4151 to enroll or obtain course information.

## 10SNE1?

### 1996 ASHRAE

### Tennis Tournament

at the Harbor Bay Club in Alameda

**Friday June 14th**

12:00 to 4:00 p.m.

Rotating Partners/Opponents Format

**Entries must be received by Friday, June 7**

**Contact Rich Leao, Chairman**

or

**Jack Kniveton, Loyal Associate...**

(415) 777-5333

Bring someone you love to  
 the June Meeting

**PRESIDENT'S MESSAGE (continued)**

astly, to all the members of the Golden Gate Chapter: Congratulations on being the best people on the face of the earth!

See you at the June meeting. Have a wonderful summer.

Welcome to the top, Dennis

Roy Gifford

**A MESSAGE TO THE PRESIDENT**

President Roy:

Thank you for a year full of inspiration and thought-filled messages. Many of us did not really know you until you gave us your monthly messages. It has amazed us how we can work side-by-side with someone and never really know the depth of that person's character and strength.

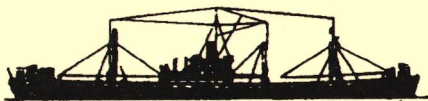
We, the members of the Golden Gate Chapter of ASHRAE, are better people for having been associated with you. You rightfully belong at the top of our mountains.

Have a wonderful summer yourself, after a job WELL DONE. THANK YOU, Roy.

The members and your friends

**MINUTES May 2, 1996**

We showed up, where were you? We enjoyed the tour and learned a lot about the Liberty Ships.

**SS JEREMIAH O'BRIEN**

Historical Tour

Pier 32 (The Embarcadero @ Brannan)

Meeting Adjourned.

**News From ASHRAE**

The ASHRAE winter meeting had an attendance of 2,990. The Society's 1996 Annual Meeting will take place June 22-26 in San Antonio, Texas. For more information contact ASHRAE Meetings Section at ASHRAE Headquarters, 1791 Tullie

Circle, N.E., Atlanta, GA 30329, (404) 636-8400, FAX (404) 321-5478.

**On the Internet:** You can get the latest from ASHRAE on the World Wide Web at <http://www.ashrae.org>.

ASHRAE has announced a 90-day public review period for ASHRAE/IESNA Standard 90.1-1989R, Energy Code for Buildings Except Low-Rise Residential Buildings.

**The MARBLE DRAW**

Who will be the lucky winner of over

**\$800**

**Special Sale on Raffle tickets**

1 for \$1

5 for \$4

8 for \$5

20 for \$10

50 for \$20

Support ASHRAE Scholarship

**WANTED: HVAC Case Studies for Education**

Can you help me out? Next Fall I will be teaching a new class at UCB for architecture students entitled Mechanical Systems and Architectural Space. The emphasis will be on the impact of HVAC systems on architectural design, energy performance, and thermal comfort. We will rely heavily on case studies to understand the impact of mechanical systems on the organization of space, and to compare architectural & engineering design *intent* vs. building and system *performance*. Our method will include field trips, field evaluation (survey, interview, physical measurements), and design analysis. I'm looking for local buildings with an interesting story to tell - perhaps a building that is historically significant, intentionally designed to be energy-efficient or "green", innovative in its architecture or engineering design, or unique in the way that the HVAC distribution system has been integrated with the structure, envelope, or interior systems. I will need easy-to-read drawings, access to the building and the mechanical systems for a class field trip, and "players" (design engineer, contractor, architect, facility manager, etc.) willing to be interviewed to tell their story. IF YOU CAN HELP, PLEASE CONTACT ME: **Gail Brager**, University of California, Dept. of Architecture, 232 Wurster Hall #1800, Berkeley, CA 94720-1800, Ph: (510) 642-1696, Fax: (510) 643-5571, e-mail: [gbrager@berkeley.edu](mailto:gbrager@berkeley.edu). Thanks!

**ASHRAE GOLDEN GATE CHAPTER  
DINNER RESERVATION FAX**

**For THURSDAY, June 6, 1996**

**Please send Fax by noon on Monday, May 27th**

**FAX TO: Ben Sun - Flack + Kurtz**

**FAX: (415)-433-5311** Please call if you have any last minute changes in plans.

**Phone: (415)-398-3833, Ext. 234** Please cancel your reservation if you cannot attend the meeting.

<b>FROM:</b> <u>DICK CHARLES</u>	
<b>COMPANY:</b> <u>C&amp;B ENGINEERS</u>	<b>PHONE:</b> <u>415. 442-0110</u>
Please make <u>5</u> reservation(s) for the following people (fill in names below):	
<u>DICK CHARLES</u>	<u>MAIRAD GRAHAM</u>
<u>VAN CHARLES</u>	<u>JEFFRY VIOLET</u>
<u>PAUL O'NEILL</u>	

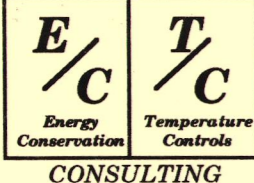
**LOCATION:** Gabbiano's (upstairs) 1 Ferry Plaza San Francisco, CA (415) 391-8403

Gabbiano's is located near Pier 2, behind the Ferry Building (Clock Tower), 1 block from the Embarcadero BART station. Limited parking is available along the Embarcadero. Valet parking is also available for \$4.25.

(Cut along the dotted line before FAXing, unless you own stock in Pacific Bell and want to help their profit)

**This space intentionally left blank  
Have a great summer!!!**

**ASHRAE**  
Honor Roll



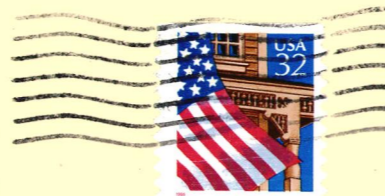
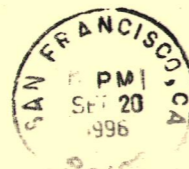
**FRANK W. MAYHEW**  
3160 Hicks Road  
Sebastopol, CA 95472  
Phone: (707) 824-9381  
Fax: (707) 824-9382

**Services for Consulting Mechanical Engineers**

- Design of temperature control systems
- Writing temperature control specifications
- Review of control submittals and proposals
- Classes in temperature controls fundamentals and applications
- Supervision of commissioning process for controls
- Analysis of systems and designs for energy efficiency



Golden Gate Chapter  
**ASHRAE**  
370 Brannan Street  
San Francisco, CA 94107



RICHARD A. CHARLES  
CHARLES & BRAUN  
150 SPEAR ST STE 500  
SAN FRANCISCO CA 94105-1537

# FOG DISPENSER

Golden Gate Chapter



**ASHRAE**

**VOLUME XXXVI \* NUMBER 1**

**October, 1996**

**Meeting NOTICE**

**Date:** Thursday, October 3, 1996

**Social Hour:** 5:30 p.m. (Happy hour beverages downstairs, be happy)

**Dinner:** 6:30 p.m.

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

**Cost:** \$27.00

**To Reserve:** Please phone or fax your dinner reservation to **Ben Sun by Monday, September 30.** A fax form is enclosed for your convenience

**Phone:** (415) 398-3833, Ext. 234

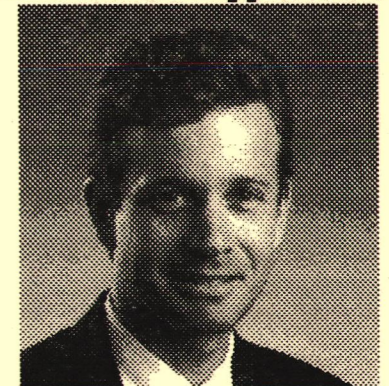
**FAX:** (415) 433-5311

Gabbiano's is located near Pier 2, behind the Ferry Building (Clock Tower), 1 block from the Embarcadero BART station.

**October Program**

**The First Large-Scale BACnet™ Demonstration**

**SPEAKER: Martin A. Applebaum, P.E.**



**Vice Pres., Energy Simulation Specialists,**

Today's EMS technology provides building owners and designers with incredible design and operational flexibility. The recent adoption of BACnet as ANSI/ASHRAE Standard 135 has the potential of greatly accelerating recent advances in the areas of interconnectivity and interoperability of building systems. The name "BACnet" refers to a communication standard for building automation and control networks. The Philip Burton Federal Building located at 450 Golden Gate Avenue was selected as the site for the first large-scale demonstration of the BACnet standard.

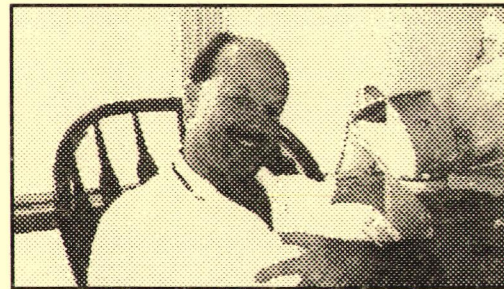
Martin (Marty) Applebaum has more than a decade of experience in energy engineering and energy conservation. In 1984, he joined Energy Simulation Specialists, Inc. (ESS), a Tempe based engineering firm specializing in energy efficient building design, building automation, and energy information systems. He has been a vice president of ESS since 1988.

**NEW MEMBERS**

**The Golden Gate ASHRAE Chapter welcomes the following new members:**

- Bob Biever..... Optimization Marketing
- Long Nguyen..... Applied Biosystems
- Reinhard Seidl..... ACCO
- Erik Dyrr..... Xenergy
- George Arellano..... Randall Lamb Associates
- David Wyllie..... Honeywell H+ BC
- Misha Anissimov..... Independent

**How about one of your associates name here?**  
Call John Small, Membership Chair. (408) 866-0723



**PRESIDENT'S MESSAGE**

Welcome back to those of you who actually went somewhere this summer. You'll be happy to know that while everyone was out playing this summer, your diligent Board of Governors has been working very hard putting together interesting programs and events for the upcoming year. If all of our Committee Chairs do their jobs (of which I am confident they will) you will most likely be asked to get involved on a committee. Give it a try, you may be surprised what a great time you will have. Our focus this year is on two key components of our Chapter's contribution to the industry, education and membership.

Education continues to be an area that as Chapter members, we can invest in our own future. The students of today will be the employees, peers and potential customers of tomorrow. Our Education Chair duties have been expanded this year to include Scholarship and the Travel Grant Programs. Our Committee Chair, Jim Brugger, has accepted this ominous task and may be soliciting a few of you for some assistance. Keep in

mind, this investment will pay off many more ways than you can imagine.

The Membership Committee will be championed by John Small. John was last years Chair and was very instrumental in increasing our Chapter membership numbers. This year he will have even more programs and events aimed at bringing new people to our group.

As a Membership Kick-Off, we will hold the Second Annual Golden Gate Chapter Picnic at Tilden Park on Saturday, October 5th. If you missed last years picnic, I am sure you remember Roy's write-up in the Fog about the great time had by all. It really is a great time to get together with chapter members and meet some great family members as well. The highlight of the day may even be my rematch with Roy in the Carousel Bronco Riding event.

I really am very excited to be your President this year. I look back at the key individuals who got me involved way back when and I know now the message they were trying to get into my thick head at the time. GET INVOLVED! You really do get out of an organization what you put in.

And in the spirit of new beginnings, I am very proud to announce the arrival of Jack Severin Thompson who arrived on September 6, 1996 at a petite 9 pounds 11 ounces. Mother, Child and displaced siblings are all doing fine.

**See you in October! Dennis**

**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 9th of month preceding meeting to:

**FOG DISPENSER**

Frank Mayhew, Editor EC/TC Consulting  
3160 Hicks Road Sebastopol, CA 95472  
Telephone (707) 824-9381  
FAX (707) 824-9382  
email gravensteininn@metro.net

Photojournalism Editor: Mike Scofield  
Quality Control: Kinnie Scofield

**DO YOU KNOW A PROSPECTIVE NEW MEMBER, or have an address change?**

**Contact Membership Chair:**

John Small ----- (408) 866-0723  
----- FAX (408) 866-5899

**Not Getting Your Fog Dispenser? Call John Small...**

**Not Listed in the Roster properly? Have a change of address or heart since the last roster? Contact Rachel Murray**

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Dan Reiter.....President-Elect  
Ernie French.....Secretary  
Ben Sun.....Treasurer  
**Board of Governors**  
Mark Hydeman- Kent Lim - Roy Gifford

**ASHRAE GOLDEN GATE CHAPTER 1995-1996 COMMITTEES AND CHAIRPERSONS**

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CRC Action..... Dennis Thompson	Education..... Jim Brugger	Energy & Tech..... Mike Morehead
Fog Dispenser..... Frank Mayhew	Golf..... Dennis Thompson	Government Affairs..Jon Wintermeyer
Historian..... Hank Mouw	Honor Roll..... Ellen Pierce	Marble Game..... Ed de Guzman
Membership..... John Small	Product Show..... Joe Olivier	PAOE..... Gail Brager
Program..... Dennis Thompson	Publicity..... tba	Reception..... Wasil Popov
Refrigeration..... Jim Davis	Research..... tba	Roster..... Tim Provo
Scholarship..... Matt McMahon	Seminar..... Ron Bush	Tennis..... Rich Leao
Database Manager. Rachel Murray	1998 ASHRAE Winter Meeting..... tba	

**ACE TROUBLESHOOTER SEEKS TOUGHER PROBLEMS**

Service man, Service Manager, Field Supervisor, Engineer (P.E.), my unusual design and service background makes most problems too easy! If you can provide the interesting ones I crave, let's talk merger. (My company serves 160+ commercial accounts, N. Bay & E. Bay.)

\*Does your service, construction supervision, or training department need a transfusion?

\*Having trouble with unusual projects or products?

\*Problems with commercial, industrial or specialty cooling in the Western Hemisphere? (Hablo Español)

**Roger Goetsch**

**Phone: (415) 453-3314**

**FAX: (510) 233-8766**

**Did You Know???**

Did you know that, for years, each edition of the *ASHRAE Handbook* has had a section entitled "ADDITIONS AND CORRECTIONS" (errata). It is here where additions and corrections to previous editions of the *Handbook* are published. This section precedes the index at the back of the volume.

Upon receipt of each new *Handbook* edition, a conscientious engineer (who has ample leisure time) will review the additions and corrections and actually record them at the *Handbook* location being corrected. Failure to do so may cause one to inadvertently use an incorrect equation, misinterpret a curve, etc.

The author of this tidbit embarrassingly acknowledges that he was unaware of such "ADDITIONS AND CORRECTIONS" until recently.

Submitted by CHJ (initials used to protect Carl's identity)

**People on the Move**

This is a new feature of the *Fog Dispenser*. The old saying is that "you can't tell the players without a program". Our industry is constantly in flux, and it is hard to keep up with where everyone is. If you have made a change recently, let us know what's happening and we will let our members know.

**Bosek Gibson & Associates, Inc. Engineering Consultants**

is pleased to announce the expansion of our Northern California Office. Our new address is:  
1371 Oakland Blvd., Suite 201  
Walnut Creek, CA 94596  
Phone: (510) 944-8929  
FAX: (510) 944-8925

**ASHRAE HANDBOOK DONATIONS**

Atma Advani has been working on a project of donating used ASHRAE handbooks to needy students in third world countries. This year handbooks have been sent to Egypt (28 books) and Romania (30 books).

Thanks to the following donors:

- Steven England, Bank of America
- Sandy Sanford, Sanford Mechanical
- Doug Herbert, Tempco Equipment Co.
- Gene Valerio, Technical Marketing Services
- Bruce Barron, William A. Barron Co.
- Rob Uhl, Safeway, Inc.
- John Ferrando, Comm Air-Petaluma
- Dorothy & Robert Brose, The Brose Company
- Richard Oas, Safeway, Inc.
- Layne Loyko

Send your spare, used handbooks to:  
**Tempco Equipment Company, Inc.**  
100 North Hill Drive #412  
P.O. Box 400  
Brisbane, CA 94005

Donors are needed to pay shipping costs, of about \$350. Contact Atma Advani (510) 467-8680

**Mechanical Engineer**

**\$4,317-\$6,475 per month**, Berkeley, CA. For University of California, San Francisco's National TB Center, to assist California high risk institutions. Requires 8+ years progressive HVAC engineering design experience, BSME, California Mechanical Professional Engineer registration.

**Fax resume with salary history to:**  
**ICS (510) 540-3535**

**HANDS-ON WORKSHOP**

**Diagnosing and Mitigating Indoor Air Quality Procedures**

The workshop begins with a review of the important indoor air contaminant source and removal mechanisms in today's buildings followed by a discussion of recommended diagnostic procedures for determining whether there is an existing or potential indoor air quality problem. The seminar then reviews various mitigation strategies which may be implemented for fixing indoor air quality problems. Methods for estimating the benefits and cost-contaminant control strategies are discussed.

Instructor: Francis J. "Bud" Offermann, PE, CIH  
When: November 4 & 5, 1996  
Where: San Francisco, CA  
Contact: Pat Cleveland, IEE Seminars  
1448 Pine Street, Suite 103  
San Francisco, CA 94109  
Phone (415) 567-7700  
FAX (415) 567-7763  
Fee: \$795 (\$695 for ASHRAE, ABIH, AIHA, and BOMA Members)

**ASHRAE GOLDEN GATE CHAPTER  
DINNER RESERVATION FAX**

**For THURSDAY, October 3, 1996**

**Please send Fax by noon on Monday, September, 30**

**FAX TO: Ben Sun - Flack + Kurtz**

**FAX: (415)-433-5311** Please call if you have any last minute changes in plans.

**Phone: (415)-398-3833, Ext 234** Please cancel your reservation if you cannot attend the meeting.

**FROM:** DICK CHARLES

**COMPANY:** CAB ENGINEERS

**PHONE:** 442-0110

Please make 2 reservation(s) for the following people (fill in names below):

DICK CHARLES

PAUL O'NEILL

**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), 1 block from the Embarcadero BART station. Limited parking is available along the Embarcadero. Valet parking is also available for \$4.25.

(Do not, under any circumstances, cut along this line! Ben can you make a reservation for me, Editor)

**STUDENT SPONSORSHIP**

*The October meeting will have students from UC Berkeley as our guests.  
Please show your support- Sponsor a Student*

**YES, I would like to provide students with the opportunity to attend our meeting**

I would like to support students for the current meeting

I am willing to sponsor \_\_\_\_\_ student(s) at \$27 each.

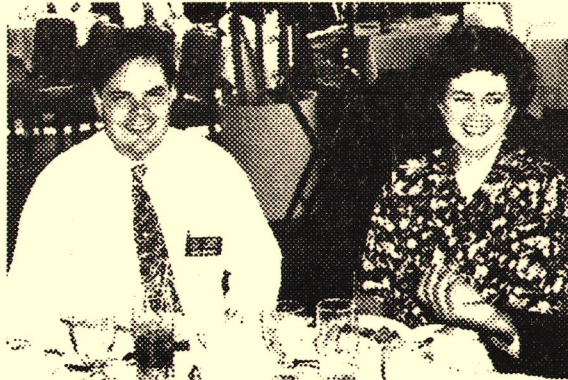
I would like to make a long term commitment.

I am willing to sponsor \_\_\_\_\_ student(s) to attend ASHRAE meetings at \$27 each, up to \_\_\_\_\_ students per meeting, and/or a total of \_\_\_\_\_ students per year.

Signature: \_\_\_\_\_

Company: \_\_\_\_\_ Phone: \_\_\_\_\_

June 2 1996 Golden Gate Chapter Meeting



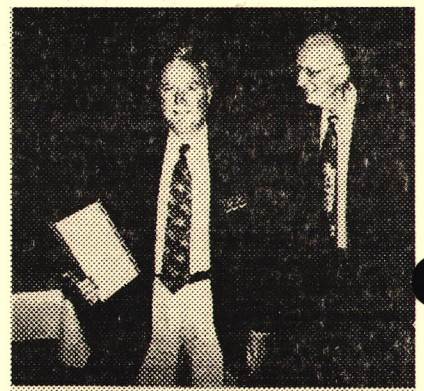
Spouse Night Dinner brought out the Spouses



Arel W. Berrier



Jack Kniveton



Hank Mouw

A fine bunch of senior members, who are still active in ASHRAE Society receive the "Old Duffers" Award from "young'un" President Roy Gifford



Tom White



Arthur Zigas



Charlie Nadig has an excellent missed-adventure with the elusive Great White Marble!

**MINUTES June 6, 1996**

Meeting called to order at 7:35 PM, by President **Roy Gifford**, who thanked the spouses for their support of the members.

Eleven past presidents were recognized and applauded for their efforts.

**Dennis Thompson** reported on a great CRC. The international chapters will no longer be members of Region X. They will be greatly missed. It was a beautiful location and an interesting conference.

**Rich Leao** announced that the **Eric Thor Andresen Tennis Tournament** is on June 14th and to see him or **Jack Kniveton** to sign up.

**Gail Braeger** made some announcements. She requested help on getting case studies of mechanical projects for her new architecture class.

Election Results were unanimous.

Roy Gifford	Past President
Dennis Thompson	President
Daniel Reiter	President-Elect
Ben Sun	Treasurer
Mark Hydeman	2nd Year Board Member
Kent Lim	1st Year Board Member

Air Treatment Control donated prizes for the raffle. Charlie Nadig won the right to draw, but drew the black marble. That leaves nothing but the winning marble for October's meeting. The person with the winning ticket will win approximately **\$1000.00**.

Mike Riley entertained us with a humorous act that was enjoyed by all.

Roy presented "Old Duffers" certificates to senior members of the chapter. **Tom White, Hank Mauw, Art Zigas, Jack Kniveton** and **Arel Berrier** were "honored".

Roy presented Certificates of Appreciation to **Keller & Gannon, Norman Wright, PG&E, Flack+Kurtz** as companies that have multiple committee chairs and board members serving. He also mentioned all the companies that have at least one member serving the chapter.

Roy presented committee chair awards and gifts to Dick Charles, Hank Mauw, Barbara Dilts, Mike Scofield, Tim Provo and Rich Leao.

A special "thanks" was given to Rachel Murray, Jim Brugger, Edgar "Marbles" DeGuzman, John

Small, Joe Olivier, Wasil Popov, Frank Mayhew, Marie Madden and Ron Bush.

Roy thanked each of the board members personally. Gail thanked the Chapter for the wonderful experience she has had on the Board.

Respectfully Submitted,  
Dan Reiter  
1995-1996 Chapter Secretary

**CONGRATULATIONS**

\*\*\*\*\*

**Donald G. Bryant, Sr.**, Fellow ASHRAE, was awarded the **Distinguished Service Award** by ASHRAE at the annual meeting in San Antonio. Don wasn't able to pick up the award in person (see below).

\*\*\*\*\*

**William J. Fisk, P.E.** a staff scientist at Lawrence Berkeley Laboratory was awarded the **Ralph G. Nevins Physiology and Human Environment Award**.

**Our Best Wishes**

Go out to **Don Bryant** who is recuperating in the Hillhaven Health Care Center after suffering a stroke a few weeks before the annual meeting. Don would like to hear from you and can have visitors. Send cards and letters to:

**Don Bryant**  
c/o Hillhaven Health Care Center  
1359 Pine Street  
San Francisco, CA 94108

For those of you that aren't aware, Don started the series of courses presented by ASHRAE Golden Gate at U.C. Extension. The series started in the mid 1970's and now has six courses in the certificate program. This program has been a model for many other chapters across the nation.

**Come back soon, Don**  
**We miss you!**

**Sponsor a Student at the October Meeting**

The UC Berkeley Student ASHRAE Chapter is being revitalized, and some students would like to join us at the October meeting. Support local education and sponsor a student for dinner.

## In Memorium

Many of the older members probably remember **ERIC ROBERTS** who died on June 30 at the age of 98. We believe that he had been the oldest member of the Golden Gate Chapter.

He came to the west coast in the early 1920's as a salesman for the Speakman Co. A few years later he became a manufacturer's representative for the Haes Drinking Co., McDonnell & Miller and the Thrush Co.

Eric joined the Golden Gate Chapter in the 30's and was president in 1954-55 when it was known as ASHVE. Eric was also active in the Plumbing & Heating Club and was president of that organization in the 1950's.

He retired in 1963, survived by two wives, and although in a walker before he died, his mind was alert and he tried to keep up-to-date on the latest technology. He was self-employed, worked by himself, and was noted for his high integrity. We older members will miss him.

Contributed by Arel W. Berrier

## The MARBLE DRAW



**ONLY ONE MARBLE LEFT**

This is great odds...

Last years marble game was a success in raising funds for ASHRAE Research. Our next pot will be worth

**over \$1,000**

## Thought for the Day

How come PHONETICS isn't spelled that way?

## PICNIC TIME

2nd Annual

**Golden Gate Chapter Family Picnic**

**Saturday October 5, 1996**

**11am to 4pm**

Bring the whole family to Tilden Park (Berserkely hills) at the Buckeye picnic site immediately adjacent to the Merry-go-Round (Maps available at the October meeting).

Bring your own meat or veggie main course and the Golden Gate Chapter will provide the chills, soft drinks and BBQ fire.

For more information, or to volunteer to help, call John Small during business hours at (408) 866-0723.

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Earn CEU or PDH Credit



Attend ASHRAE's  
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**Air System Design and Retrofit**  
September 30-October 1, 1996

**Water System Design**  
October 2-3, 1996

in  
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Telephone: 800-527-4723, Fax: 404-321-5478



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Golden Gate Chapter  
 ASHRAE  
 370 Brannan Street  
 San Francisco, CA 94107

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

# FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XXXVI \* NUMBER 2

November, 1996

**Meeting NOTICE**  
 Thursday, November 7, 1996  
**STUDENT AND MEMBERSHIP NIGHT**  
 Pre-Dinner Seminar  
 5:00 p.m.

**Social Hour:** 5:30 p.m.  
**Dinner:** 6:30 p.m.  
**Location:** PG&E Energy Center  
 851 Howard St. (Between 4th & 5th)  
 San Francisco, CA (415) 973-7268  
**Cost:** \$27.00  
**To Reserve:** Please email, phone or fax your  
 dinner reservation to **Ben Sun** by  
**Monday, November 4.** A fax form  
 is enclosed for your convenience  
 (415) 398-3833, Ext. 234  
**Phone:**  
**FAX:** (415) 433-5311  
**Email:** [bpsun@sf.fk.com](mailto:bpsun@sf.fk.com)

The Center is located 2 blocks south of the Powell St. BART Station. Public Parking is available across the street from the Center. **Because the Energy Center uses outside catering, there is less flexibility in accommodating late reservations and walk-ins.** Please reserve promptly!

**Pre-Meeting Seminar 5:00 p.m.**  
**UNDERSTANDING BACnet**

Did last month's program leave you with a hunger to learn more about BACnet? This year's first Pre-meeting Seminar will be an opportunity to learn even more about this amazing advance in Building Automation Systems.

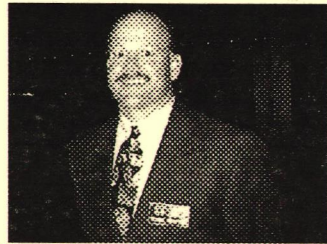
The first pre-meeting seminar will feature the players involved in the first large scale commercial BACnet demonstration project: the 450 Golden Gate Project. Call Joe Olivier (415) 296-9760 for reservations. Refreshments served.

**November Program**  
**Designing DDC for Maximum**  
**System Efficiency**  
 Frank W. Mayhew, EC/TC Consulting



Last month you heard how BACnet is going to make your facilities more efficient. This month find out how to get the most efficiency out of your air conditioning by using the DDC system to integrate the systems from the zones back to the air handlers and central plant. Unfortunately, many DDC systems are installed using the same control sequences that were used with pneumatic controls, wasting the potential power that these systems make possible. This program will describe the control strategies that can be easily implemented providing your clients with value for the money spent.

Frank Mayhew is a consultant in temperature controls and energy conservation. After 17 years controls contracting experience, Frank has, for the last five years, been a consultant analyzing control systems, recommending energy efficiency projects and specifying control systems. Frank is a member of ASHRAE TC 1.4, Temperature Controls and Applications, and, TC 4.6, Building Operation Dynamics. Since 1982 he has been teaching Temperature Controls for Air Conditioning in the ASHRAE series at UC Extension.



**PRESIDENT'S MESSAGE**

All great seasons begin with a great start. With a turnout like last months, this year's Golden Gate ASHRAE Season looks to be a great one. With over 100 dinners served, it is a very good indicator of the level of interest the ASHRAE BACnet Standard Open Protocol is generating.

Our speaker gave an excellent overview of the intent of what the standard strives to achieve and a brief description of the first implementation test site. As our speaker noted, this standard will have a significant impact in the overall marketing of control products and systems integration solutions.

Want To Hear More! Attend the pre-meeting Technical Session at the Energy Center this month. Call Joe Olivier at (415) 296-9760 to confirm your attendance. We are going to try and make these new Follow-up Technical Sessions a new forum to discuss key products, technologies and applications in our industry.

Our 2nd Annual Chapter Family Picnic at Tilden

Park was a success. For those of you who missed it, maybe next year. It really is a great opportunity to see your peers and associates outside the business arena, show off your kid demonstrate your prowess with the Bar-B-Que utensils and yes, ride the carousel.

In keeping with the Building Automation theme, our November speaker will give a consultants view of the overall effectiveness of Direct Digital Control systems and Energy Efficient control strategies. Don't miss this one, as this topic always generates a lively Q & A session afterwards.

Looking ahead to the remainder of the year we have a lot of great programs lined up. Our Field Trip location is firming up, so make sure to pencil in this event on the second Thursday in May. This calendar adjustment is being made to accommodate members attending the CRC in Phoenix the previous week.

Don't forget, November is Membership night. If you know someone who would like to join or you can get a regular attendee into paying their dues, bring them to the meeting. We're giving away free Marble Draw/Raffle tickets to anyone who brings a new member (with completed application) to the meeting. It's a great way to keep building our membership and improving our Chapter. Don't forget we're meeting at the Energy Center this month!

See you in November! Dennis

October 3, 1996 Golden Gate Chapter Meeting



Steve Blanc discusses utility deregulation with Craig Speer, Regional Research Chair



John Karmiris and Mike Tsuchimoto enjoy the Pre-meeting "Seminar"

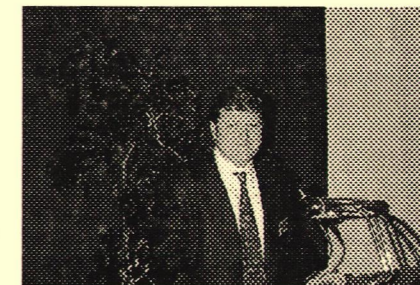


Gail, Rich and Dan trading sea stories during Happy Hour. Gail looks the happiest!

**BEFORE**



Jolly Jim Brugger says "Have I got a deal for you"



Smiling John Small tries to give directions to the picnic, but gets lost!



Speaker Martin A. Applebaum "I really love you guys" "Sorry Marty, you can't have our Anchor Steam!"

**DURING**



Janti Sommer bought all these tickets just for a great bottle of Sonoma County Wine



And the winner of \$800 is.... NEW member Pete Gaddy with Raffle Chris Sommer who sold all those tickets to Janti



New Faces Join ASHRAE Pete Gaddy, Dave Wyllie John Small(Membership Chair) and Bill Murray

**IN BETWEEN**

**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 9th of month preceding meeting to:

**FOG DISPENSER**

Frank Mayhew, Editor EC/TC Consulting  
3160 Hicks Road Sebastopol, CA 95472  
Telephone (707) 824-9381  
FAX (707) 824-9382  
email gravensteininn@metro.net

Photojournalism Editor: Mike Scofield  
Quality Control: Kinnie Scofield

**DO YOU KNOW A PROSPECTIVE NEW MEMBER, or have an address change?**

**Contact Membership Chair:**

John Small (408) 866-0723  
FAX (408) 866-5899

**Not Getting Your Fog Dispenser? Call John Small...**

Not Listed in the Roster properly? Had a change of address, or heart, since the last roster? Contact Ginny Gifford

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 Brannan Street, San Francisco, CA 94107

**1996 --1997 OFFICERS**

Dennis Thompson .....President  
Dan Reiter.....President-Elect  
Ernie French.....Secretary  
Mark Hydeman.....Treasurer  
**Board of Governors**  
Ben Sun- Kent Lim - Roy Gifford

**ASHRAE GOLDEN GATE CHAPTER 1996-1997 COMMITTEES AND CHAIRPERSONS**

Attendance..... Richard Charles	Awards..... Barbara Dilts	Auditing..... Hank Mouw
BAEC..... Tom Reinarts	Code..... Roy Gifford	CRC Action..... Dan Reiter
Education..... Jim Brugger	Energy & Tech..... Joe Olivier	Fog Dispenser..... Frank Mayhew
Golf..... Mike Rubio	Government Affairs..... Jon Wintermeyer	Historian..... Hank Mouw
Honor Roll..... Ellen Pierce	Marble Game..... Edgar DeGuzman	Membership/Picnic..... John Small
Product Show..... Bob Levi	PAOE..... Roy Gifford	Program..... Dan Reiter
Publicity..... Mike Scofield	Reception..... Wasil Popov	Refrigeration..... Dave West
Research..... Barbara Dilts	Roster..... Tim Provo	Scholarship/Travel..... Jim Brugger
Seminar..... Joe Olivier	Tennis..... Rich Leao	1998 Meeting..... Tom Reinarts

**ASHRAE GOLDEN GATE CHAPTER  
DINNER RESERVATION FAX**

**For THURSDAY, November 7, 1996**

**Please send Fax by noon on Monday, November 4, 1996**

**FAX TO: Ben Sun - Flack + Kurtz**

**FAX: (415)-433-5311** Please call if you have any last minute changes in plans.

**Phone: (415)-398-3833, Ext 234** Please cancel your reservation if you cannot attend the meeting.

**Email: bpsun@sf.fk.com**

**FROM:** DICK CHARLES

**COMPANY:** C&B ENGINEERS **PHONE:** 442 0110

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

DICK CHARLES \_\_\_\_\_

PAUL O'NEIL \_\_\_\_\_

JEFFREY DITTMAN \_\_\_\_\_

(Frank Mayhew)

**LOCATION:** Pacific Gas & Electric Energy Center  
851 Howard Street  
San Francisco

The Center is located 2 blocks south of the Powell St. BART Station. Public Parking is available across the street from the Center.

(Save money, save trees, use Email...)

**STUDENT SPONSORSHIP**

*The November meeting will have students from UC Berkeley and other schools as our guests.*

*Please show your support- Sponsor a Student*

**YES, I would like to provide students with the opportunity to attend our meeting**

I would like to support students for the current meeting

I am willing to sponsor \_\_\_\_\_ student(s) at \$27 each.

I would like to make a long term commitment.

I am willing to sponsor \_\_\_\_\_ student(s) to attend ASHRAE meetings at \$27 each, up to \_\_\_\_\_ students per meeting, and/or a total of \_\_\_\_\_ students per year.

Signature: \_\_\_\_\_

Company: \_\_\_\_\_ Phone: \_\_\_\_\_

**MINUTES October 3, 1996**

Meeting called to order at 7:34 PM. There were 101 members present. The minutes from the June, 1996 meeting were approved with the correction as follows:

**Ernie French** was elected Secretary for the 1996-97 year.

**Announcements**

**Don Bryant** is recovering from the stroke he suffered earlier this summer. He can be visited at Pinehaven Healthcare, 1359 Pine St., Room 213, San Francisco.

**Mark Hydeman** will assume the role of Treasurer for the 1996-97 year. Ben Sun will remain as the second year board member.

Thanks to the generous individuals and companies who sponsored students from the UC Berkeley Student Chapter.

**Dick Charles-C&B Consulting Engineers**

**Dennis Thompson-The Trane Company**

**Joe Olivier-EnerSys Consultants**

**Jim Nemechek-Air Filter Control**

**Kent Lim-Kent Lim Company**

**Bob Levi-Carrier**

**Tom Judson-Power Flame**

**Craig Spear**, the ASHRAE Regional Research Chair, shared some inspiring words regarding Fundraising for Research. There are significantly more projects than dollars available to fund them, so please donate generously. Remember, with ASHRAE, 100 percent of your donation funds projects that benefit us all.

**Tim Provo** announced that this year's roster will go out ahead of schedule in late November. It is the members responsibility to confirm that the information is correct. If you are uncertain about your information in the roster, you may contact ASHRAE Society, or Ginny Gifford at (510) 647-9445. In addition, the information will be available for your review at the November meeting.

**The Office of Statewide Health Planning and Development (OSHPD) Building Safety Board ASHRAE Representative** position is open. ASHRAE was represented for the last ten years by Shlomo Rosenfeld. The selection procedure has not been defined at this time. Individuals interested in this position can receive more information from Jon Wintermeyer, Government Affairs Committee Chair at Keller & Gannon.

**Mark Hydeman** announced that PG&E will be holding numerous upcoming programs.

**John Small** announced that the meeting in November will be Membership night. Also, this year's Family Picnic will be held Saturday, October 6, at Tilden Park.

**Jim Brugger**, Chair of Education, Scholarship and Travel Grant, named the following members as part of his committee: **Hormoz Jansen**, Alfatech Consultants (Co-chair); **Derek Tsang**, Kent Lim Company, and **Matt McMahan**, Johnson Controls. The committee will be expanding the Outreach Program started last year which brings representatives from the HVAC&R industry to local schools and Universities.

The **1998 ASHRAE Winter Meeting** will be held in San Francisco. Tom Rein arts and Dick Charles will be Co-Chairs. They are looking for chairs for the following committees: Finance, Tours (two people), Publicity, Entertainment, Session Monitors (two people), and Hospitality.

The **Marble Draw** wine prizes were donated by **The Trane Company**. Winners of the wine were: **Yanti Sommers**, **Dick Porter**, **Joe Olivier**, **Dennis Thompson**, **Marty Applebaum**, and **Frank Mayhew** (who was later seen drinking his in the parking lot). The big prize \$800 was won by a visitor from GSA.

The program was an interesting presentation of the 450 Golden Gate BACnet test program presented by Marty Applebaum of EnerSys.

**Respectfully Submitted,**

**Ernie French**

**1996-1997 Chapter Secretary**

**ASHRAE Research**

The 1996-97 ASHRAE Research Fund drive has already started. Those of you who attended the October Chapter meeting heard from Craig Speer, our Region X Vice Chair for Research. A number of you have already contributed to ASHRAE Research when you paid your Chapter and Society dues this past summer. THANKS!

If you haven't contributed yet, start thinking about YOUR contribution. Every little bit helps. Here are some suggestions: \$3 for every year you have been an ASHRAE member; \$1 for every time you open one of the handbooks; \$125 to become an Individual Honor Roll contributor: \$1,000,000 (only one of you needs to choose this option).

You'll hear more from the Chapter Research Committee, but why wait. Make your check payable to ASHRAE Research and mail it to:

**Barbara Dilts**

**Pacific Gas & Electric Company**

**P. O. Box 770000, Mail Code H28H**

**San Francisco, CA 94171**

### Looking for Employment

Seasoned Mechanical PE with seven years experience in project management, utility services, and energy systems. I am looking for employment with a mechanical design/installation company in the north bay to eliminate my 124 mile round trip commute. I am fluent with a variety of software packages and have excellent personal skills. Please call **Tim Holmes** at (707) 833-1887. I will make myself available for an interview at your convenience.

### NEW COMMITTEE CHAIRS AND BOARD LIAISON FOR 1996-1997 CHAPTER YEAR

COMMITTEE	CHAIR	BOARD LIAISON
Attendance	Dick Charles	Ernie French
Editing	Hank Mouw	Ben Sun
Awards	Barbara Dilts	Roy Gifford
AEC	Tom Reinarts	Roy Gifford
By-Laws	Dick Charles	D. Thompson
Code	Roy Gifford	Roy Gifford
RC Action	Dan Reiter	Dan Reiter
Database	Virginia Gifford	Ernie French
Education	Jim Brugger	Kent Lim
Energy/Tech	Joe Olivier	Mark Hydeman
Fog Dispenser	Frank Mayhew	Ernie French
Gift	Mike Rubio	Ben Sun
Gov't Affairs	Jon Wintermeyer	Mark Hydeman
Honor Roll	Ellen Pierce	Ernie French
Marble Game	Edgar DeGuzman	Ben Sun
Gov't Affairs	Jon Wintermeyer	Mark Hydeman
Historian	Hank Mouw	D. Thompson
Honor Roll	Ellen Pierce	Ernie French
Membr./Picnic	John Small	Dan Reiter
AOE	Roy Gifford	Roy Gifford
Product Show	Bob Levi	Kent Lim
Program	Dan Reiter	Dan Reiter
Publicity	Mike Scofield	D. Thompson
Reception	Wasil Popov	Kent Lim
Refrigeration	Dave West	Kent Lim
Research	Barbara Dilts	Mark Hydeman
Roster	Tim Provo	Ernie French
Scholar/Travel	Jim Brugger	Kent Lim
Seminar	Joe Olivier	Mark Hydeman
Annis	Rich Leao	Ben Sun
998 ASHRAE	Tom Reinarts	Dan Reiter

Every year since I've been involved with ASHRAE it never ceases to amaze me what a great organization we have. People are what make this group dynamic. People who serve on Technical Committees at the Society level, and work on Chapter committees are what ASHRAE is about.

**Dennis Thompson**

### Thought for the Day

The grass is always greener on the other side of the fence.

But then, they do water their lawn...

### People on the Move

This is a new feature of the *Fog Dispenser*. The old saying is that "you can't tell the players without a program". Our industry is constantly in flux, and it is hard to keep up with where everyone is. If you have made a change recently, let us know what's happening, and we will let our members know.

### They've Moved

#### Peter A. Hartdegen Co., Inc.

2363 Mariner Square Drive, Suite 243

Alameda, CA 94501

Phone: (510) 865-7100

FAX: (510) 865-7277

\*\*\*\*\*

### Energy Simulation Specialist

#### announces San Francisco Affiliate

**Energy Simulation Specialist** is pleased to announce the formation of **EnerSys Solutions, LLC** to serve the Northern California area. EnerSys Principals are Joe Olivier and Greg Cunningham. Find them at:

**EnerSys Solutions, L.L.C.**

**114 Sansome Street, Suite 201**

**San Francisco, CA 94104**

**Phone (415) 296-9760**

**FAX (415) 296-9761**

### Upcoming FREE Programs at the PG&E Energy Center

#### November 19-BACnet: "Will it Work for You?"

This program features BACnet and its first large-scale implementation at the Philip Burton Federal building from the perspectives of the protocol's authors, an owner, a design engineer and the contractors implementing it. Presentations will be made by H. Mike Newman, chairman of the ASHRAE BACnet Standards committee, Terry Pierce, manager for GSA of the 450 Golden Gate BACnet demonstration project, Joe Olivier of EnerSys Solutions and representatives from both Alerton and Trane.

#### December 6 - "Commercial Building Energy Simulation: Tool Product Show."

This program will feature side-by-side presentations of commercial building simulation software tools using the same office building model for each. The software programs featured include: Visual DOE, Trace, Power DOE, HAP & Comply.

Both programs begin at 10:00 am and run to 4:30 PM. For more information or to register call (415)973-7268 or visit the web site at <http://www/pgc.com/pec>



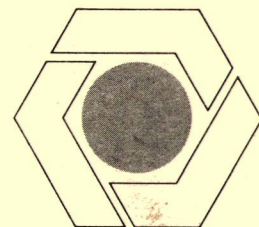
# FOG DISPENSER

Golden Gate Chapter  ASHRAE

VOLUME XXXVI \* NUMBER 3

December, 1996

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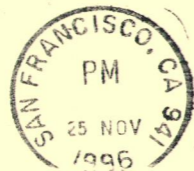
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### Meeting NOTICE

Thursday, December 5, 1996

#### Pre-Dinner Seminar

5:00 p.m.

**Social Hour:** 5:30 p.m.

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

**Cost:** \$27.00

**To Reserve:** Please email, phone or fax your dinner reservation to **Ben Sun** by **Monday, December 2**. A fax form is enclosed for your convenience

**Phone:** (415) 398-3833, Ext. 234

**FAX:** (415) 433-5311

**Email:** [bpsun@sf.fk.com](mailto:bpsun@sf.fk.com)

Gabbiano's is located near Pier 2, behind the Ferry Building (Clock Tower), 1 block from the Embarcadero BART station. Valet parking is available.

#### Pre-Meeting Seminar 5:00 p.m. Getting Minimum Outside Air With VAV Systems

Frank Mayhew will cover some of the problems and solutions to controlling minimum outside air volume in VAV systems.

The old method of installing fixed minimum outside air on VAV systems doesn't work if you want to provide the minimum air amount, for indoor air quality purposes, even when the supply fan turns down to meet less-than-design loads.

Call Joe Olivier (415) 296-9760 for reservations. Refreshments will be available.

### December Program

#### 1994 Uniform Building Code Fire/Smoke Damper Update

##### Chris Schartz, Ruskin Manufacturing

The 1994 Uniform Building Code has been adopted by most of the states in the western region of the United States. Virtually all of the major metropolitan areas are now using the 1994 UBC for their minimum construction requirements.

The 1994 UBC includes new provisions to prevent smoke migration through the HVAC system during a fire. Clearly, smoke is now recognized as the significant cause of injury, loss of life and property damage in building fires. Combination fire/smoke dampers are required in penetrations of area and occupancy separations, exits and corridors, shaft walls, and areas of refuge. In addition, these fire/smoke dampers are required to be Class II 250°F construction.



Chris Schartz has more than 24 years experience at Ruskin Manufacturing in the testing, development, manufacturing and application of fire, smoke and combination fire/smoke damper technology. He is currently Ruskin's Sales and Application Manager for the western region of the United States.



**PRESIDENT'S MESSAGE**

While it is true that exceptional individuals stand out amongst the crowd, in athletic and academic contests, it is always interesting, to watch a Team of exceptional people work together. If you think back to the last summer in Atlanta, we saw a group of women gymnasts make history as a Team. Sure we've had many gold medalists in the past, but this year we witnessed a group of people with individual performances, working together, towards a new level of excellence. It really gives you a picture of what is possible when everyone is on the same page and working towards a common goal.

Every year since I've been involved with ASHRAE it never ceases to amaze me what a

great organization we have at both the Society and Chapter levels. People are what make this group dynamic. From the people who serve on Technical Committees at the Society level to those who chair committees for our own chapter. Without people working together we would all have to scratch our collective heads for design standards and question just why we meet once a month.

It's the work of people from my immediate Team (Board of Governors) to our extended Team (Committee Chairs) that keep the Chapter moving to new levels of excellence. It's the work of many of your fellow Chapter members at Society's Technical and Standards Committees level that give you the new tools to help you perform at higher levels.

While exceptional individual performance is a good feeling, I encourage you join any one of ASHRAE's Teams in some capacity and you'll take that feeling to a higher level. Look at last months' Fog Dispenser for the list of Committees and their Chairs. Get involved with some of these great groups, if you haven't already. Like they say in the Peace Corp., you'll come back with a lot more than your luggage.

We'll see you in December! Dennis

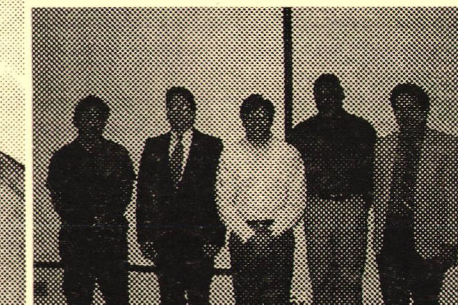
**November 7, 1996 Golden Gate Chapter Meeting**



You can almost see the lights going on in some of the heads at Joe Olivier's pre-meeting seminar.



Rich Greco and Jim Davis discuss Utility Deregulation.



Can you identify the new members? Rick Myers, Jeff Dittman, Bill Breyton, Jim Piere and/or Brent Adams.



Barbara Dilts tries to explain to a student why she should give \$100 to ASHRAE research.



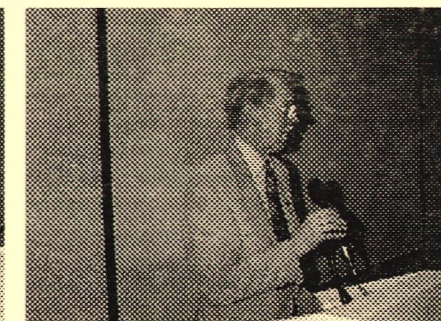
They don't serve food like this at the student chapter meetings.



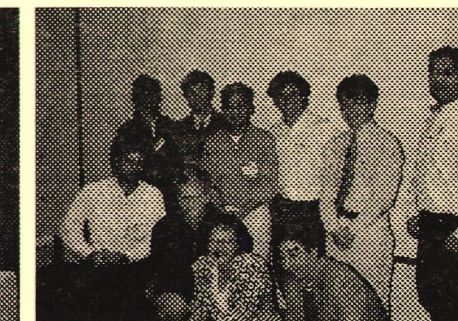
Professor Gail Brager leads off her introduction of Allison Kwok with a short slide show of the "Wonderful" Adam Brager.



Allison Kwok, President of the U.C. Berkeley Student Chapter tells the aforementioned Professor



Dick Charles, Chair of the Winter 1998 ASHRAE, meeting to be held in San Francisco, appoints some "Volunteers".



Students today... Your boss tomorrow.

**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 9th of month preceding meeting to:

**FOG DISPENSER**

Frank Mayhew, Editor EC/TC Consulting  
3160 Hicks Road Sebastopol, CA 95472  
Telephone (707) 824-9381  
FAX (707) 824-9382  
email gravensteininn@metro.net

Photojournalism Editor: Mike Scofield  
Quality Control: Kinnie Scofield

**DO YOU KNOW A PROSPECTIVE NEW MEMBER, or have an address change?**

**Contact Membership Chair:**

John Small (408) 866-0723  
FAX (408) 866-5899

**Not Getting Your Fog Dispenser? Call John Small...**

Not Listed in the Roster properly? Had a change of address, or heart, since the last roster? Contact Ginny Gifford

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 Brannan Street, San Francisco, CA 94107

**1996 --1997 OFFICERS**

Dennis Thompson .....President  
Dan Reiter.....President-Elect  
Ernie French.....Secretary  
Mark Hydeman.....Treasurer  
**Board of Governors**  
Ben Sun- Kent Lim - Roy Gifford

**ASHRAE GOLDEN GATE CHAPTER 1996-1997 COMMITTEES AND CHAIRPERSONS**

Attendance..... Richard Charles	Awards..... Barbara Dilts	Auditing..... Hank Mouw
BAEC..... Tom Reinarts	Code..... Roy Gifford	CRC Action..... Dan Reiter
Education..... Jim Brugger	Energy & Tech..... Joe Olivier	Fog Dispenser..... Frank Mayhew
Golf..... Mike Rubio	Government Affairs..... Jon Wintermeyer	Historian..... Hank Mouw
Honor Roll..... Ellen Pierce	Marble Game..... Edgar DeGuzman	Membership/Picnic..... John Small
Product Show..... Bob Levi	PAOE..... Roy Gifford	Program..... Dan Reiter
Publicity..... Mike Scofield	Reception..... Wasil Popov	Refrigeration..... Dave West
Research..... Barbara Dilts	Roster..... Tim Provo	Scholarship/Travel..... Jim Brugger
Seminar..... Joe Olivier	Tennis..... Rich Leao	1998 Meeting..... Tom Reinarts

**SUPPORT ASHRAE RESEARCH**

**ASHRAE Golden Gate Meeting Minutes  
November 7, 1996**

Meeting was called to order at 7:42 pm by **Dennis Thompson**.

100 Members and guests were present.

The Minutes from the October, 1996 meeting were approved as printed in the Fog Dispenser.

A. **David Low**, consulting engineer, recently passed away, he was a long time, and well respected ASHRAE member as well as a prominent member of the Chinese community, he will be missed.

B. **Barbara Dilts** reported the upcoming plans of the Research Committee. One of this year's goals will be to make contributing fun. Barb suggested that you think of contributing to research in every day activities. For example, donate \$5 for every time you reach for the handbook, and it isn't there. Or donate \$1 for every year of your age (it's OK to cheat if you are over 55). In addition, the committee will be encouraging everyone to get in the habit of contributing even if the amounts are small.

C. **Jim Brugger**, Chair of the Education Committee, welcomed 12 students to student night. He announced that the travel grant applications are available.

D. **Gail Brager** reported on the success of the UC Berkeley student chapter, ten members attended tonight.

E. **Allison Kwok**, President of the UCB Student Chapter spoke of the ambitious plans of the group including active roles in Engineer's Week, and an upcoming Anchor Brewery Tour.

F. **Allan Daly**, recipient of the 1996 Travel Grant, reported on his trip to the Summer meeting in San Antonio. Allan was surprised at how easy it was to become actively involved in the meeting, despite the distractions of having to room with Mark Hydeman.

G. Special thanks to all the companies and individuals who sponsored students.

**Mr. Ed DeGuzman ACCO**  
**Mr. Dan Hoffman,**  
**Mr. Mark Hydeman, PG& E Energy Center**  
**Mr. Rich Leal, Norman Wright Equipment.**  
**He sponsored 3 students.**  
**Mr. Bob Levi, Carrier**  
**Mr. David Lintott, Takahashi Consulting Engineers**  
**Ms. Linda McDaid, Honeywell**

**Mr. Dennis Thompson, Trane**  
**Mr. Dan Reiter, Winzler & Kelly**

H. **Joe Olivier**, Chair of Seminar, Energy & Technical affairs announced that they had held a successful pre-dinner seminar following up the BACnet theme from last meeting's program. Before the next meeting, **Frank Mayhew** will conduct a similar follow-up session entitled " 2/3 down the duct - Bah Humbug!!!"

I. Marble Draw Prizes were donated by **Sal Giglio** of the Norman Wright Company. There were no big winners of this month's Marble Draw.

J. **Frank Mayhew** gave an enlightening discussion on the value of DDC controls..."it's the zone stupid..." Nice presentation Frank.

Meeting was adjourned at 9:15 pm.

**Respectfully Submitted,**  
**Ernie French**  
**1996-1997 Chapter Secretary**

**ASHRAE Golden Gate Board Meeting  
Motions**

From the October 17th meeting 1996

Due to a cost increase at Gabbiano's Restaurant, the board **approved a motion to raise the cost of dinner to \$30 beginning in January, 1997.**

**ASHRAE RESEARCH**

The 1996-97 ASHRAE Research Fund drive has already started. Those of you who attended the October Chapter meeting heard from Craig Speer, our Region X Vice Chair for Research. A number of you have already contributed to ASHRAE Research when you paid your Chapter and Society dues this past summer. THANKS!

If you haven't contributed yet, start thinking about YOUR contribution. Every little bit helps. Here are some suggestions: \$3 for every year you have been an ASHRAE member; \$1 for every time you open one of the handbooks; \$125 to become an Individual Honor Roll contributor; \$1,000,000 (only one of you needs to choose this option).

You'll hear more from the Chapter Research Committee, but why wait. Make your check payable to ASHRAE Research and mail it to:

**Barbara Dilts**  
**Pacific Gas & Electric Company**  
**P. O. Box 770000, Mail Code H28H**  
**San Francisco, CA 94171**

## People on the Move

This is a new feature of the *Fog Dispenser*. The old saying is that "you can't tell the players without a program". Our industry is constantly in flux, and it is hard to keep up with where everyone is. If you have made a change recently, let us know what's happening, and we will let our members know.

### Ratcliff & Associates Announces Formation

Mike Ratcliff is starting an engineering service firm specializing in laboratory fume hood testing, stack design for avoiding wind-induced reentry, duct flammability calculations. Mike is chair of TC 2.5 and voting member of TC 9.10.

Ratcliff & Associates  
733 Sunnyside Road  
St. Helena, CA 94574  
Phone: (707) 963-2573  
Fax: (707) 967-1165

### Rumor Has It

That **Jack Kniveton** has retired, but he enjoyed the retirement party so much that he went back to work so he could have another party. Stay tuned...

## Upcoming FREE Program at the PG&E Energy Center

**December 6 - "Commercial Building Energy Simulation: Tool Product Show."**

This program will feature side-by-side presentations of commercial building simulation software tools using the same office building model for each. The software programs featured include: Visual DOE, Trace, Power DOE, HAP & Comply.

The program begins at 10:00 AM and runs to 4:30 PM. For more information or to register call (415)973-7268 or visit the web site at <http://www/pge.com/pec>

## Thought for the Day

The trouble with life is, you're already halfway through it before you realize it's a 'do it yourself' thing.

## HELP WANTED

Glamorous position as editor of high-powered, professional monthly news letter catering to exciting air-conditioning industry.

**Above average pay and benefits** for the right person. No pay or benefits for anyone who volunteers.

For details on this exciting career opportunity, contact

Dennis Thompson, President  
Golden Gate Chapter, ASHRAE  
(707) 963-2573

## Temperature Controls for HVAC

**Wednesday, February 5, 1997**

**X473 (2 units, 30 hours)**  
**EDP: 306274**

**Location: Downtown Center 150 4th St. S. F.**

This course covers the principles involved in the selection and design of temperature controls for HVAC systems. Topics include controls theory and fundamentals; pneumatic, electric, electronic and computer based hardware; control application for zones, air handlers and chilled water and hot water systems. Emphasis will be on energy efficient controls, through understanding the effect of controls on the systems, and integration of controls and systems using Direct Digital Control systems.

Lecturer: **Frank W. Mayhew**, EC/TC Consulting, Sebastopol, CA.

## HVAC Design: Equipment and Distribution Systems

**X470 (2 units, 30 hours)**

This course presents the engineering fundamentals and practical considerations for the design of components and layout of HVAC systems and equipment. It is a practical course that outlines the design process for all major HVAC components commonly in use. Lectures cover the selection and specification of components such as fans, coils, filters, pumps, chillers, cooling towers, boilers, water heaters, terminal devices, and air outlets. The design of air and water distribution systems is outlined with consideration for first cost, energy costs, and other practical matters such as space and maintenance. Energy conservation measures are highlighted throughout the course and presented with consideration for energy codes, utility rebate programs and economic evaluation.

Lecturers: **Steven T. Taylor** and **Mark Hydeman**