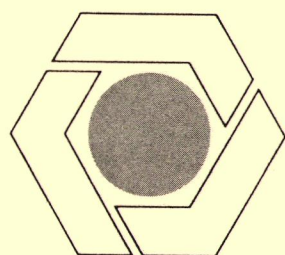




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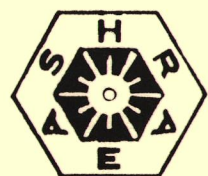


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FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XXXIV * NUMBER 4

JANUARY, 1995

MEETING NOTICE

Date: Thursday, January 5, 1995

Social Hour: 5:30 p.m.

Dinner: 6:30 p.m.

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

Cost: \$27.00

To Reserve: Please phone or fax your dinner reservation to **Ernie French** by **Monday, January 1 (Happy New Year!)**. A fax form is enclosed for your convenience

Phone: (415) 589-8313

Fax: (415) 266-6888

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 (there is a change machine in the center strip parking area). Valet parking is also available for \$4.25.

NEW MEMBERS

The Golden Gate ASHRAE Chapter welcomes the following new members:

Sarah Long..... Savage Engineering
Bill Kapanen..... California Hydronics
Joe Olivier..... Electronic Systems USA
Sonia Collacchia..... Keller and Gannon
(Terrible mis-spelling last month)

JANUARY PROGRAM

PROGRAM: Value Engineering-Does it have any value? A panel discussion

SPEAKERS:

Bryan Zylstra, ASHEN & ALLEN
Gino Colacchia, O'BRIEN-KREITZBERG
Willy Mautner, TURNER CONSTRUCTION
Grant Wong, GAYNER ENGINEERS

The topic of value engineering is bound to be controversial among our membership. Many of us have seen cost cutting in the name of value engineering. There is another method to value engineering, one that really emphasizes value, where the goal is truly equal function at a lower cost through innovation.

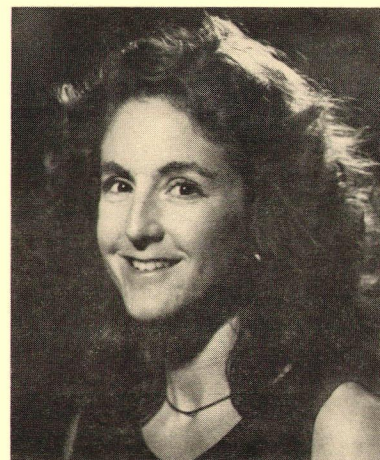
The panelists collectively have much experience in the value engineering process. Each comes from a different discipline within the construction industry. They will share their experiences and viewpoints on the subject. The membership will have the opportunity to question the panel and bring their own experiences to the discussion.

Gino Collacchia, Certified Value Engineering Specialist, is a former Chapter president and is currently a construction manager. He has been in the construction industry for 28 years.

Willy Mautner, general contracting estimator has worked in his field for 20 years. He has been a resident engineer and a construction superintendent.

Grant Wong, president of Gayner Engineers, has been a consulting engineer for 29 years. He has designed mechanical systems for hospitals, laboratories, airports and commercial buildings.

Brad Zylstra, Senior Associate Architect, is responsible for the technical quality of his firm's health care and institutional projects. He was formerly an associate partner with SOM, San Francisco.



PRESIDENT'S MESSAGE

Many thanks to **Steve Murphy** for what, by all accounts, was an excellent presentation at our November meeting. Thanks also to **Dennis Thompson** for filling in for Roy by organizing the program, and by filling in for me by running the business meeting. Be assured that I was thinking of you while I was happily home taking care of my 2 week old son, **Adam** (who, by all accounts is a beautiful, peaceful and healthy baby!).

I also want to thank the membership who

attended the December meeting for their patience with the over-crowded conditions downstairs at Gabbiano's. This was the only month of the year that they were unable to accommodate us upstairs, but we will continue to meet upstairs from now on.

Rick Paillon is organizing our January program, a panel discussion that is sure to generate some lively discussion. Mark your calendar and get your reservation in on time.

The ASHRAE Winter Meeting and Exposition is January 28 thru February 1 in Chicago. This meeting will be particularly exciting in that it is the culmination of ASHRAE's celebration of our Centennial, offering a wide variety of unique exhibits and programs. See our editors special message for inspiration and tips on inexpensive air fares.

The latest news from **Roy Gifford** is that he has competed his chemo' and radiation treatments and the doctors are encouraged by his response. I know the cards and encouraging thoughts he has received from his Golden Gate friends have meant a lot to him, so let's keep them coming!

I wish you all a joyous holiday season filled with love of family and friends, and high hopes for the new year. I'll see you in January.

Gail Brager

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

Contact *Membership Chair*:
Michael Rubio (415) 777-5333
FAX (415) 641-4413

MAIL, FAX or PHONE NEWS TO: FOG DISPENSER

Frank Mayhew, *Editor*
ECTC Consulting
3160 Hicks Road
Sebastopol, CA 95472
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FAX (707) 824-9382

FOG DISPENSER DEADLINES

Meeting Dates Copy Deadlines

February 2, 1995 ----- January 9, 1995
March 2, 1995 ----- February 9, 1995
April 6, 1995 ----- March 9, 1995
May 4, 1995 ----- April 9, 1995
June 1, 1995 ----- May 9, 1995

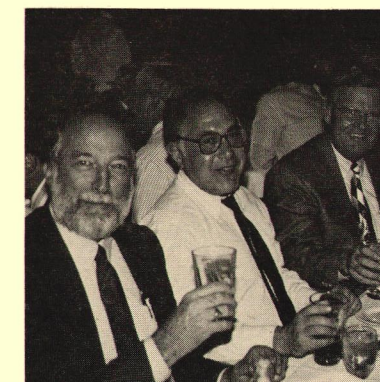
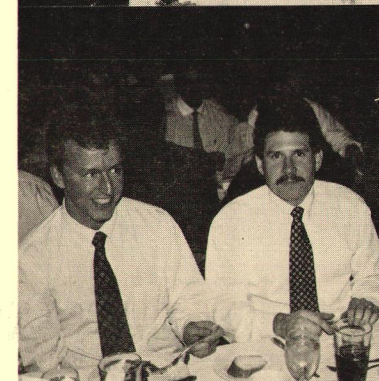
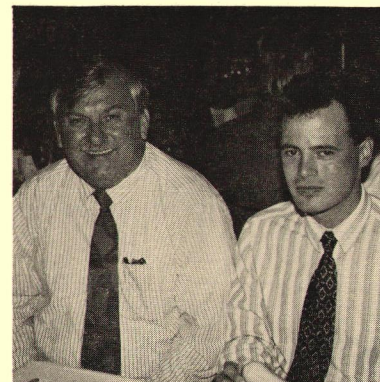
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Roy Gifford..... President Elect
Dennis Thompson Secretary
Dan Reiter Treasurer
Board of Governors
Ben Sun - Ernie French - Rick Paillon

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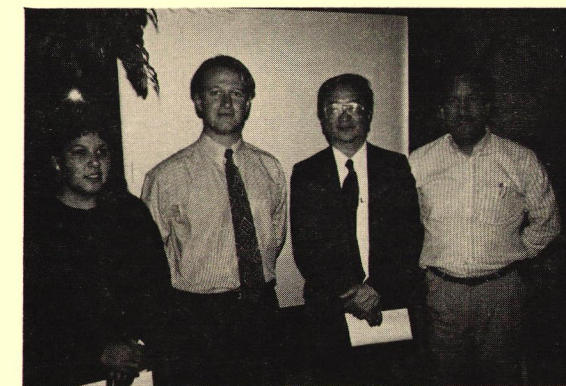
HAPPY HOLIDAYS FROM THE GOLDEN GATE ASHRAE CHAPTER



Members and friends get an early start on the holiday spirit at the December 1, 1994 Dinner Meeting



Dennis Thompson awards Chapter Certificates of Appreciation to Barbara Dilts and Jack Kniveton



Congratulations to New Members (Left to Right) Sonia Colacchia, Mark Johnson, Jim Hao and Lou Pietrelli

MINUTES December 1, 1994

The meeting was called to order at 7:05 PM by **Dennis Thompson**. Self introductions followed.

Tony Occhionero, Assistant Regional Chair presented Rick Paillon with a PAOE award and patch for the banner for his year as president. Tony also presented a pin and pamphlet to Dennis Thompson for Gail Brager since she was not in attendance (due to some minor excuse or another named Adam Brager, born 11-18-94).

Approval of the minutes with correction that **Ben Sun** was not the Scholarship Chair (*Editors note: If Ben would read his Fog Dispenser he would have noted that the correction had been made, Sorry Ben*). **Matt McMahon** is the Chair.

Bob Voelz spoke on ASHRAE history and why it is such a good organization to belong to both at the local and national level. He noted he began as a student member in 1950.

Jack Kniveton spoke on history also. He joined the Chapter in 1948. He urged members to be involved and expressed how satisfying the experience of involvement is.

Tim Provo stated the roster was coming along and should be mailed to members by February He noted sponsors are still needed and encouraged member who have not paid their dues to please do so.

Marie Madden, Research Chair, thanked **Ben Sun** and **Flack and Kurtz** for their \$500.00 donation.

Mike Moorehead, Seminar Chair stated the topic is not settled yet and some help would be appreciated.

Dennis Thompson noted the Golf Tournament would not be joint with the San Jose Chapter. He also stated that a location has not been set but June 9 was a tentative date.

Rick Paillon announced that the January Topic will be Value Engineering "Does It Have Any Value?". It will be a panel discussion. Speakers will be **Gino Collacchia**, **Grant Wong** from Gaynor, **Willy Munter**, and **Brad Zylstra** from Ashen & Allen.

Ernie French announced that 92 people was the attendance count, ACCO won the company attendance award with 5 members attending, Ernie also stated 15 members signed up for the meeting and did not come to tonight's meeting, **Dennis Thompson** announced that **Hank Mouw** will be this year's historian. Thanks **Hank**.

Dennis also announced all our Chapter's members that are active at the National Society Level.

Atma Advani	David McMinn
Gail Brager	Dennis Nugent
Bob Braun	Richard Oas
Tom Campbell	Bud Offerman
Dick Charles	Tom Reinarts
Tom Gilbertson	Robert Sonderegger
Richard Greco	Ben Sun
Brad Gustafson	Steve Taylor
Robert Hogue	Bob Voelz
Mark Hydemann	Tom White
Frank Mayhew	Robert Wistort

Dennis Thompson awarded Certificates of Appreciation to **Jack Kniveton** for **Mike Rubio** for his involvement in Membership Promotion and to **Barbara Dilts**, for her work on both Membership and Roster Committees.

Tim Provo performed the raffle.

Dennis Thompson introduced tonight's speaker, **Steve Murphy** Steve spoke on Pharmaceutical Facility HVAC design. It was a well presented, engaging topic.

Meeting was adjourned at 9:00 P.M.

Respectfully submitted, Dan Reiter

DID YOU KNOW?

The San Francisco Bureau of Building Inspection is requiring the installation of fire dampers on all high rise buildings in accordance with Section 4306(j) of the San Francisco Building Code. On sprinkled high rise buildings, this requirement is contrary to the modifications allowed under Section 1807(c) 2D of the 1992 Edition of the San Francisco Building Code. and the 1991 Editions of the Uniform Building Code and the State of California Building Code. BBI has indicated that the 1992 beige printed San Francisco Code Amendments are in error relative to Section 1802(c)2D and they are still enforcing the 1989 Edition of that Section. The basis for their position is that the addition of this modification was never submitted to, or approved, by the Board of Supervisors when the 1992 Building Code amendments were approved in Ordinance 157-92 on June 4, 1992. The fire dampers may be deleted in some other cities, but not in San Francisco.

Submitted by **Bob Voelz**

(Do you have an item for DID YOU KNOW? Send it to the Editor, Fog Dispenser.)

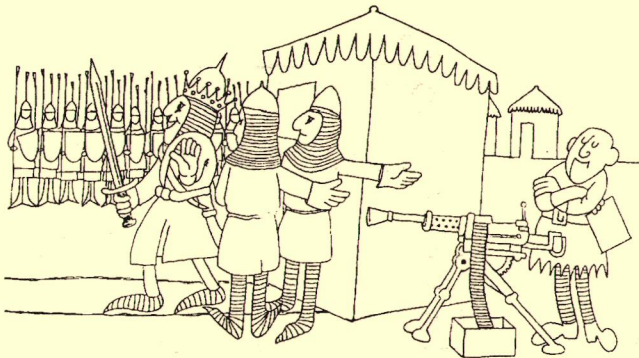
Not receiving your *Fog Dispenser*? Bug **Mike Rubio**, Membership Chair...(415)777-5333.

Student Scholarship Donations Needed

With the rising costs of education and declining participation, ASHRAE students need HELP! Also, many of you may not know that the universities are faced with rising costs and have been forced to cut back on programs. In recent years, many universities and colleges have cut the programs that focused on the HVAC&R industry. Frequently, students only take a handful of HVAC&R classes, rather than a full focus.

We must continue to support the students with a desire to study and enter this field. We are asking for you and your organization to support the Bay Area student involvement through donations. These donations are tax deductible. You can donate to either the Golden Gate Scholarship, or the Eric Thor Andresen Memorial Scholarship.

Please send your donation to:
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Small East Bay wet side Rep firm needs inside sales/office person. Must know Macintosh operating system and work well on phones. Benefits, Good Location.

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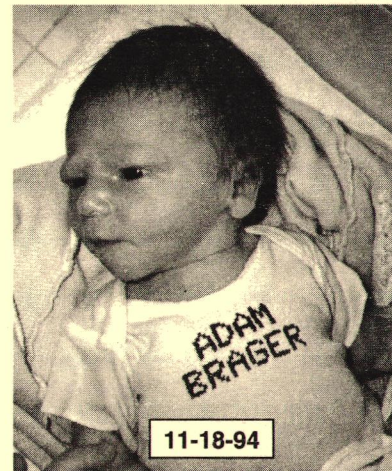
**Invite a Friend to ASHRAE this month.
 Invite two, the more the merrier!**

EDITORIAL

Three years ago I started going to the Society meetings. You cannot imagine what a change that has made in my professional career and knowledge base. Symposiums, seminars and technical presentations only scratch the surface of what ASHRAE is about. Try attending Technical Committee meetings covering your area of interest. I went to technical committee meetings on Building Operation Dynamics and Temperature Controls and was welcomed to serve. This has led to my participation on the research subcommittees on both these TC's. The knowledge to be gained has exceeded the time expended.

Any member of ASHRAE who does not take advantage of the Society meetings is only getting half of the package. Attend the Winter meeting in Chicago in January, or the Annual meeting in San Diego next June and reap the benefits.

Note there is a bargain air package available on Southwest Air going from Oakland to Chicago's Midway airport for \$600 for two on their "friends fly free" promotion.

WANTED

ADAM GEOFFREY BRAGER
 also known as "Baby Face"

escaped from solitary confinement at 11:55 a.m.

DESCRIPTION:

male -- 7 lbs, 0 oz. -- 20½ in. -- reddish brown hair

ACCOMPLICES:

Geno and Gail Brager

WARNING:

*suspect's diaper may be loaded;
 approach with extreme caution*



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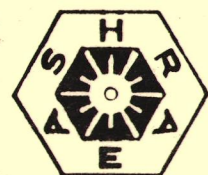
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* = GOLDEN GATE CHAPTER ASHRAE Member



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FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XXXIV * NUMBER 5

FEBRUARY, 1995

MEETING NOTICE

Date: Thursday, February 2, 1995
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
(415) 391-8403
Cost: \$27.00
To Reserve: Please phone or fax your dinner reservation to **Ernie French by Monday, January 30.** A fax form is enclosed for your convenience
Phone: (415) 589-8313
FAX: (415) 266-6888

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 (there is a change machine in the center strip parking area). Valet parking is also available for \$4.25.

NEW MEMBERS

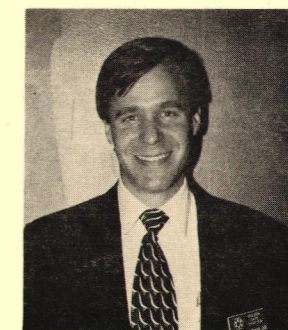
The Golden Gate ASHRAE Chapter welcomes the following new members:
Leslie Hanohano-Rodden.....Norman Wright Co.
Michael Holmes.....E. B. Ward
Dorel Anghel.....Mechanical Design Studio
Scott Wayland.....Glumac International
Saul Villanueva.....Polytech Associates
Joe B. Kim.....Carrier Corp.
Bob Levi.....Carrier Corp.
Chris Case.....Keller and Gannon
Charles Cook.....Crane Pumps and Systems

FEBRUARY PROGRAM

PROGRAM: IAQ and the New ASHRAE Standard 62

SPEAKER: Steve Taylor, The Linford Company

This important presentation will provide us with an update on indoor air quality problems and how they are addressed in the proposed new ASHRAE Standard 62, scheduled to be published for public review in the Spring of 1995. Steve will have just returned from the ASHRAE meeting in Chicago, so he will be giving us the absolute latest information about the proposed changes. This Standard will affect all of us in the industry, so come find out what to expect and how to prepare.



Steve Taylor recently re-joined The Linford Company after spending three years in Atlanta helping start a Design/Build department for a large mechanical contractor. Previously, he worked for The Linford Company for eight years as a senior engineer and project manager responsible for design-

ing and managing the construction of HVAC systems for major commercial projects. For the last ten years Steve has been very active with ASHRAE at both the local level and with Society, where he is a member of the Standards Committees responsible for both Standard 62 and Standard 90.1.

Attend The ASHRAE Winter Meeting



PRESIDENT'S MESSAGE

Thanks are due to **Rick Paillon** and **Gino Collacchia** for organizing a lively and informative panel discussion on Value Engineering in January. I also want to recognize and welcome one of our Chapter's newest members - **Sonia Collacchia** of Keller and Gannon. Could Gino and Sonia be the first father/daughter-in-law pair for the Golden Gate Chapter? Let me know if you remember an earlier precedent.

Mark your calendar and SHOW UP for the February meeting, where our own **Steve Taylor** will give us the "hot off the press" update about ASHRAE Standard 62 following the Chicago

meeting. And if you'll attending the Chicago meeting yourself, be sure to get your dinner reservations to Ernie French BEFORE you leave town!

I applaud the individuals and companies who made private donations towards this year's Golden Gate Travel Grant, enabling three students to attend a Society meeting. See inside this newsletter for the names of the generous donors.

Jim Brugger is doing a stellar job of organizing activities for Engineer's Week, February 19-25. If **you** are involved in any activities for Engineer's Week, please tell our Publicity Chair, **Rachel Murray**, so we can give you proper recognition (and so the Chapter can get PAOE points as well!).

Would you like to contribute a Centennial-related article to the *FOG Dispenser*? You can highlight a company or individual who has a history in our industry, summarize an historical ASHRAE paper, or provide an information tidbit for "Did You Know?". Or how about bringing an historical artifact for display at one of our Chapter meetings? And don't forget about contributing ideas to **Tom Gilbertson** for our Chapter's Time Capsule.

News from **Roy Gifford** - progress is steady, but slower than he and the doctors would like. Keep those cards coming!

Gail Brager

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

Contact *Membership Chair*:
Michael Rubio (415) 777-5333
FAX (415) 641-4413

MAIL, FAX or PHONE NEWS TO: FOG DISPENSER

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Publicity..... Rachel Murray	Reception..... Steve Doberstein	Refrigeration..... Jim Davis
Research..... Marie Madden	Roster..... Tim Provo	Scholarship..... Matt McMahan
Seminar..... Mike Morehead	Tennis..... Rich Leao	

Not receiving your *Fog Dispenser*?
Mike Rubio, Membership Chair will solve the problem 415)777-5333.

Golden Gate ASHRAE 1995 Student Travel Grants

Ben Sun, announced the award of the following student travel grants for 1995 to **Anne Baughman, Tengfan Xu, and Alison Kwok**. All are students at the U.C. Berkeley School of Architecture, in the 1996 Ph.D. in Building Science program.

The travel grants, of \$500 each, are to be used for travel and lodging expenses at ASHRAE Society meetings.

Due to the excellent applications this year, Golden Gate ASHRAE is awarding three travel grants for 1995. The two additional grants were made possible by the generosity of the following ASHRAE members and companies:

- Mr. Stuart Bass, Prime Air** (Exclusive sponsor of one travel grant)
- Mr. Mark Hydeman**, ASHRAE Member
- Mr. Don Druyanoff**, Trane Company, Sunnyvale
- Mr. Ben Sun**, ASHRAE Member
- Carrier Corporation**, San Francisco Bay Area
- Yamas Control, Inc.**, South San Francisco
- Tempco Equipment Company**

opportunities. Each speaker will present a 10-15 minute speech touching on their part of the industry and what they look for when they hire someone.

Free pizza and soft drinks will be provided.

On Saturday the San Francisco Bay Area Engineers Council will hold hands-on and visual demonstrations of the many different branches of engineering represented in the Bay Area.

During the week of February 13th-17th U.C. Berkeley is having an industry fair on campus. The Golden Gate Chapter will have a booth with pamphlets addressing career options in HVAC. The week can also be used by companies for recruiting. We need two volunteers per day to work the booth from 10 a.m. to 2 p.m. Lunch and reserved parking will be provided by the University.

Please help the Chapter increase our public exposure during this most important time of the year. For more information contact:

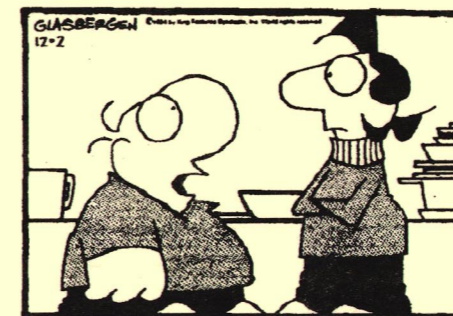
Jim Brugger
Keller and Gannon
(510) 455-1480

In Memorium

On Tuesday, January 3, **Michael Rhea**, Principal of Michael Rhea and Associates of San Rafael and San Francisco, was killed in the crash of his plane in the Tehachapi mountains en route to the Bay Area. The crash was not reported in the Bay Area so many people who knew Mike may not be aware of the tragedy. Mike is survived by his wife and son who reside in Prescott, Arizona. Lorrie Rhea had a memorial service for Mike at Gross Field in Marin on January 21st.

If you would like more information, contact Steve Blanc at 510-866-5570.

THE BETTER HALF Glasbergen



"Did you crank up the heat again? My earwax is melting!"

National Engineer's Week February 19th thru 25th

Three activities are planned for National Engineer's Week

ASHRAE will hold a panel discussion, at the Pacific Gas & Electric Energy Center, for college Juniors and Seniors focusing on the various aspects of the HVAC industry and career

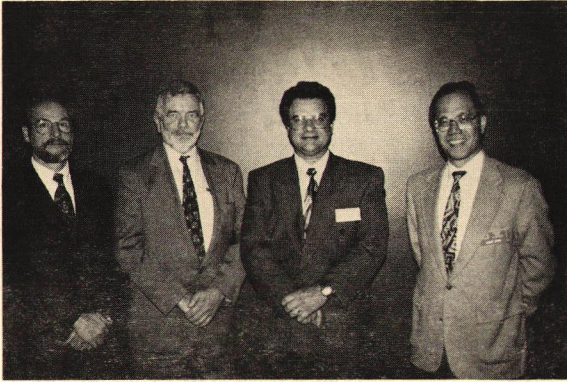
San Francisco Bay Area Engineering Council

Presents
1995 Engineer's Week Banquet
Thursday, February 23rd
6 p.m. Cocktails
7 p.m. Dinner

San Francisco Presidio Officers Club
Keynote Speaker: Marty Brenneis
"Cheap Engineer" Industrial Light & Magic
Lucasfilm, Ltd.

Presentation of:
Tau Beta Pi Eminent Engineer
and
Scholarships to Bay Area School Students
For Details: Call Gary Fritze (510) 946-0455

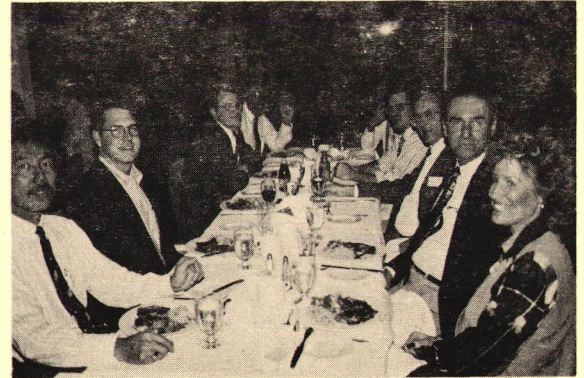
January 5, 1995 Golden Gate Chapter Meeting



"Value Engineering --Does it have any Value?" Panelists (Left to Right): Willy Mautner, Brad Zylstra, Gino Colacchia and Grant Wong.



Membership Chair, Mike Rubio, (third right) introduces new members (left to right) Tony Loretelli, Michael Holmes, Scott Wayland, Bill Kapanen and Norm Winings.



Happy New Year from our *Illustrious* Membership

MINUTES January 5, 199

Meeting was called to order at 7:16 PM.

December meeting minutes were approved by **Bob Voelz** with a second by **Tom Reinarts**.

-Norman Wright Company was recognized for exceptional attendance with six people at the meeting.

-Lester Nakata-Regional Vice Chair, Refrigeration made a visit to the Chapter and thanked all those people who volunteered their time and efforts to support ASHRAE.

-Society winter meeting in Chicago-**Dick Charles**. This year's winter meeting proves to be the largest to date and looks like it is going to be a great event. With over 25 Forum discussions and numerous Technical Seminars, the program will be well worth the trip.

-Travel Grant Award-**Ben Sun**. This year's Travel Grant program had two recipients because of the exceptional caliber of the applicants. The awards were given to **Anne Baughman** and **Tengfan Xu**, Cal Graduate students. The Travel Grant program provides money to offset travel costs for a student to attend Society meetings. The second Travel Grant Award was partially sponsored by the following companies and individuals: **Don Druyanoff**, Pacific Coast Trane; **Stewart Bass**, Prime Air. More donors were to be sought.

-*FOG Dispenser*/Centennial Program-**Mike Scofield**. Mike requested contributions of historical nature for the February Edition.

-Centennial Program Chair-**Tom Gilbertson**. Tom updated us on the Time Capsule project. He requested nominations and will take the ten best items for inclusion in the Time Capsule. He still plans to have Willis Carriers' daughter-in-law attend one of our meetings.

-National Engineers Week- **Jim Brugger** National Engineer's Week is in February and Jim is organizing a Panel Discussion and Presentation of Manufacturers, Engineers and Contractors to be held at the Pacific Energy Center. There is also an activity planned at UCB Lawrence Hall of Science.

-Roster-**Tim Provo**. Absolutely last chance to update your roster information is (was) Monday, Jan 9. The Roster committee is trying to produce the final list of members to get the Roster to print and distribution by February.

-Seminar-**Mike Morehead**. This years Seminar topic will be "Smoke Control in Buildings". The date will be April 20th or 27th and one of the speakers will be Mike Dillon of Dillon Associates, a noted expert in the field.

-CRC-**Saul Villaneuva**. Saul is the San Jose ASHRAE Chapter CRC chair. CRC is going to be May 5th and 6th at the Fairmont Hotel and will be a Joint meeting with Region XI. There should be a lot of individuals from the Pacific Rim countries. There are going to be a lot of activities including a golf tournament.

The program was a panel discussion on the topic of "Value Engineering" by **Gino Collacchia**-O'Brien Kreitzberg Associates; **Bryan Zylstra**-Ashen & Allen; **Willy Mautner**-Turner Construction; and **Grant Wong**-Gayner Engineers. The panel gave a brief discussion of their involvement, the benefits and drawbacks of Value Engineering. This lively discussion provided a lot of insight to this aspect of our business.

-Meeting was adjourned at 9:05 PM.

Respectfully submitted, Dennis Thompson

DID YOU KNOW?

Did you know that the ASHRAE basis for duct fitting pressure loss coefficients for divided flow fittings (tees, wyes) has changed? The loss coefficient, C , multiplied by the velocity pressure results in the duct fitting pressure loss. The coefficients tabulated at the end of Chapter 32, "Duct Design" in the 1989 ASHRAE Handbook; C_{cb} for the branch and C_{cs} for the straight section; are to be multiplied by the velocity pressure in the "common" section of the fitting (upstream for supply).

However, that has been changed. The coefficients tabulated in the 1993 Handbook, C_b and C_s , are to be multiplied by the velocity pressures in the branch or straight sections, respectively, of the fittings (downstream for supply).

Furthermore, the tabulation in the 1993 Handbook is incomplete (very few fittings). ASHRAE has available an expanded list of fittings in a software database.

The basis of SMACNA's 1990 HVAC Systems Duct Design is the same as the 1989 ASHRAE Handbook.

Submitted by Carl Jordan

(Do you have an item for DID YOU KNOW? Send it to the Editor, Fog Dispenser.)

Technology for a Better Environment



1995 CRC Regions X & XI

being held in
The Heart of the Silicon Valley
San Jose, California

May 3, 4, 5 & 6

ASHRAE:

"Shaping the Environment for the Next 100 Years"

Conference Center:

Fairmont Hotel
Downtown San Jose

Region X

* Sacramento Valley * Golden Gate * San Joaquine * Southern California *
* San Diego * Central Arizona * Tucson * Southern Nevada * Northern Nevada *
* San Jose * Orange Empire * Hawaii * Singapore * Malaysia *
* Hong Kong * Sierra Delta * Taiwan * Tri County * India * Saudi Arabia*

Region XI

* Manitoba * Southern Alberta * Northern Alberta * British Columbia *
* Inland Empire * Puget Sound * Oregon * Regina * Saskatoon * Anchorage *
* Mid Columbia * Vancouver Island *

**ASHRAE GOLDEN GATE CHAPTER
DINNER RESERVATION FAX**

For THURSDAY, February 2, 1995

Please send Fax by Low Noon on Monday, January 30, 1995

(unless you are at the ASHRAE winter meeting, then FAX by Friday, January 27, 1995)

FAX TO:

FAX: (415)-266-6888

Phone: (415)-589-8313

Ernie French - Yamas Controls

Please call if you have any last minute changes in plans.

Please cancel your reservation(s) if you cannot attend the meeting.

FROM: _____

COMPANY: _____

PHONE: _____

Please make _____ reservation(s) for the following people (*fill in names below*):
Please check all boxes for each person attending.

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 line below is for the amusement of the editor...do not cut on it under penalty of dearth.)

Preview of Coming Attractions

THERMAL STORAGE

March 2, 1995

There will be presentations from two different perspectives:

Mr. Shlomo Rosenfeld, Golden Gate Chapter member and principal of Shlomo Rosenfeld & Associates. Shlomo will stress the need for fundamentally sound processes in design of Thermal Storage Systems.

Mr. Gary Rugel, of Baltimore Air Coil, Baltimore, MD will speak on the history, development, and the state of the art in Thermal Storage Systems.

Pre-Dinner Technical Seminar

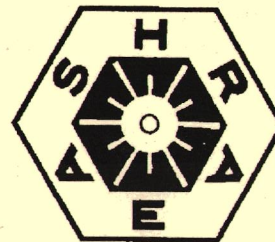
Mr. Dale Missimer, principal of Polycold, Inc. of San Rafael will present his work in cryogenics and some "Refrigeration Magic" they perform using poly-phase refrigerants. While his work is mainly applicable to traditional refrigeration processes, some of it may find application in HVAC cooling. This is a chance to get information and discuss the subject with a leader in the field.

ASHRAE Golden Gate Chapter Centennial Edition

Technology for a Better Environment



Fog Dispenser



The following are articles about some of the pioneering companies in the Bay Area that have helped shape our industry and have provided some of the leaders in our Chapter and Society.

Golden Gate Chapter, ASHVE established 1937

The Golden Gate Chapter of the American Society of Heating and Ventilating Engineers (ASHVE) was established in 1937 with 9 members. By January of 1938 the Chapter had 38 members. The first president of Golden Gate Chapter of the ASHVE was **Baldwin M. Woods**, a Mechanical Engineering Professor at University of California at Berkeley.

In 1944 the San Francisco Section of the American Society of Refrigeration Engineers (ASRE) was established.

ASHVE changed its name to The American Society of Heating and Air Conditioning Engineers (ASHAE) in 1955. The Golden Gate Chapter hosted the first annual meeting in June of that year.

The Golden Gate Chapter of ASHRAE was chartered in 1958. The chapter grew from the combination of ASRE and ASHAE.

In 1969 the Golden Gate Chapter of ASHRAE was incorporated in 1969 much to upset of the Society. After due consideration the Society recognized that incorporation of the Chapters was a good idea and now all chapters incorporate.

Another first for the ASHRAE occurred in the mid-fifties when Don McLeod as chair of CRC put

together a technical program at CRC. The Society once again objected, but soon decided that this was another good idea and now all CRC's have technical programs.

Tom White established??? 1936

Tom White was hired in 1936 by American Blower Company. Tom was one of the original Charter members of the original ASHVE and served as its president in 1952-53. Tom is the only charter member of the ASHVE that still attends our regular chapter meetings. Tom retired from American Blower in 1976.

Two of the other alumni of American Blower are: **Chuck McLaughlin**, who went on to found his own firm McLaughlin Associates, and **Mike Scofield**, Conservation Mechanical Systems.

Norman S. Wright Company established 1905

We are celebrating the founding of the original ASHRAE 100 years ago. Only 11 years later the original Norman S. Wright Company was founded. Both organizations have continued to grow and prosper in the intervening years. Early on, the Wright Company recognized the tremendous contribution that ASHRAE was making to our industry so always supported their activities. Offices of the company from Las Vegas to Honolulu actively support our Society.

Jack Kniveton joined the company in 1948 and immediately joined ASHVE. Jack was president of the Golden Gate Chapter of ASHRAE in 1963-64.

*ASHRAE Golden Gate Chapter
Centennial Edition*

Fog Dispenser

Rich Leao follows Jack in active participation and served as president of the Chapter in 1992-93. Jerry Kechter was active in the Golden Gate Chapter and went on to serve two terms as president of the Sierra Delta Chapter.

G.M. Simonson & T.R. Simonson established 1924

The firm was organized in 1924 by **G. M. Simonson** and a partner, who separated in a few years. Major projects during the 1930's were the Alameda County Courthouse and Oakland's Paramount Theater. **T. R. Simonson (Tom)**, son of G. M. joined the firm as a partner in 1952 and took over the firm in 1974, upon his father's retirement.

G. M. Simonson was one of the charter members of the Golden Gate Chapter of ASHVE and served two terms as president 1938-39 and 1939-40. Thomas R. Simonson served as the first president of the Golden Gate Chapter of ASHRAE in 1959-60.

Two other Simonson personnel have served as president of the Golden Gate Chapter. **Donald E. McLeod** was president in 1955-56. **Irving Alger** served as president in 1971-72.

Other distinguished alumni of Simonson were **Clyde Bentley**, founder of Bentley Engineers and **Jim Gayner**, who founded Gayner Engineers.

The firm has designed mechanical systems for many large projects including the PG&E headquarters and the Transamerica pyramid. They pioneered the use of computer aided design of multi-loop and grid fire sprinkler systems.

The Bentley Company established 1935

Clyde E. Bentley founded his mechanical, electrical, and civil engineering firm in 1935, after spending several years working with the G. M. Simonson firm. Clyde was one of the charter members of the Golden Gate Chapter of ASHVE and served as its president in 1941-42. Clyde was licensed in California as a Mechanical, Electrical and Civil Engineer, and carried the Registration Number 3 for his mechanical and electrical license numbers. Clyde's son, **Donald C. Bentley**, worked for the company after graduation from U.C. Berkeley, and assumed control of the

firm in 1966. Don's son **D. Clayton Bentley**, took over the firm in 1968.

Buonaccorsi & Associates established 1945

In 1945 **Al Buonaccorsi** and **Joe Murray**, Mechanical Engineers, along with **George Garthorne**, an Electrical Engineer founded the firm of Garthorne, Buonaccorsi and Murray. In 1953 Garthorne retired from the firm and **Mel Lewis** replaced him, the firm being named Buonaccorsi, Murray and Lewis. By 1963, both Lewis and Murray had left the firm and the present name, Buonaccorsi and Associates was adopted.

Joe Murray was active in ASHVE and served as the president of the Golden Gate Chapter in 1953-54.

Buonaccorsi & Associates continues to provide Professional Engineering Consultation in the fields of Mechanical and Electrical Engineering.

C&B Consulting Engineers established 1948

C&B Consulting Engineers are in their 47th year of providing consulting engineering services. The practice began when **Alfred B. Charles** opened shop at 251 Kearny Street in 1948. **Richard A. Charles** joined the firm in 1954. Richard continued the practice after the death of his father in 1956.

Richard A. Charles and **Robert H. Braun** founded Charles & Braun in February 1958. **Igor Tartakovsky** became a partner in 1988.

Bob Braun retired from the firm in 1991. In 1993 the name was changed to C&B Consulting Engineers.

Richard Charles served as president of the Golden Gate Chapter of ASHRAE in 1974-75 and just completed his term as president of the Society last year.

Adam Geoffrey Brager established 1994

Perhaps the first time in the history of ASHRAE, a child was born to the President of a Chapter. **Gail S. Brager**, established **Adam Geoffrey Brager** on November 18, 1994. Gail, by coincidence is a Professor at UC Berkeley, the same as the first president of Golden Gate ASHVE.



MARCH HONOR ROLL

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



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C&B CONSULTING ENGINEERS
150 SPEAR STREET #500
SAN FRANCISCO CA 94105
C

FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XXXIV * NUMBER 6

MARCH, 1995

MEETING NOTICE

Date: Thursday, March 2, 1995
Pre-Dinner: 5:00 p.m. Pre-Dinner Technical Seminar
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 **Ernie French by Monday, February 27.** A fax form is enclosed for your convenience

Phone: (415) 777-5333
FAX: (415) 641-4413

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

THE "R" IN ASHRAE PRESENTS PRE-DINNER TECHNICAL SESSION MARCH 2, 1995 5:00 PM

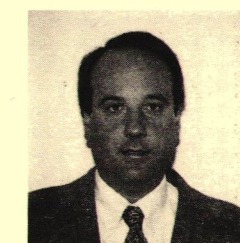
Mr. Dale Missimer, Chairman and CEO of Polycold Systems International, manufacturer of cryogenic systems, will speak on the Polycold Auto-Refrigerating Cycle in which all the refrigerants are combined into a single multi-component stream which is circulated by a single compressor. By comparison, conventional cascade refrigeration cycles use several pure refrigerants contained in closed loops, each with its own compressor. The advantages of the Auto-Refrigerating Cycle include: simplicity, reduced maintenance and greater reliability. A recent development in this area is a new CFC free refrigerant. This is REFRIGERATION magic...

MARCH PROGRAM

PROGRAM: Thermal Cold Storage
SPEAKERS: Schlomo Rosenfeld & Gary Rugel

Gary Rugel, Manager, Thermal Storage Business Development, Baltimore Air Coil Company will speak on: Historical Perspective, Present trends and Future Growth Possibilities for Thermal Storage from the manufacturers point of view.

Schlomo Rosenfeld, Principal, Schlomo I. Rosenfeld & Associates, Oakland, CA will speak on: Thermal Energy Storage Design: The Odds are Stacked Against It. He will address concerns that, although TES systems have tremendous potential to save operating costs, current design procedures stack the odds against them by placing too much emphasis on applications and not enough on engineering fundamentals.



Mr. Rugel has been affiliated with Baltimore Air Coil for nine years. His current responsibilities include new applications and markets for cold thermal storage, development of new thermal storage products, and glycol based thermal storage equipment.



Mr. Rosenfeld has over 25 years of field experience and an impressive list of awards and publications as well as many successful design projects both on his own behalf and while affiliated with Syska & Hennessy. His current firm, focuses on energy efficient indoor environments.



PRESIDENT'S MESSAGE

Steve Taylor gave an excellent presentation last month about the proposed revisions to ASHRAE Std. 62, as well as providing a brief history of the standard while clearing up many commonly-held misconceptions. Thanks Steve!

We had an unusually high number of people submitting their reservations late for the February meeting. Since the number of servers Gabbiano's retains for the evening is set when we call in our guaranteed minimum, this meant that we didn't have enough servers that night to provide what is usually more prompt service. (And we came very close to not having enough food or chairs!). One more reason to PLEASE, PLEASE, Please get your reservations to Ernie on time! (Note: Ernie is now at Norman Wright).

Jim Davis has worked hard to put together an excellent Refrigeration program for this month including a pre-dinner technical seminar which will be held upstairs at Gabbiano's. Come early, grab a drink, and check it out.

The grace period is over, and the FOG Dispenser is now being mailed only to people who are current in their dues. If you have a friend or colleague who is not receiving this newsletter, please have them contact our Membership Chair **Mike Rubio** to check their dues payment status.

Joe Olivier is doing a fantastic job planning for the Product Show to be held April 6. He is incorporating a wide variety of new ideas to enhance the success of this year's show from both the vendors' and attendees' viewpoints. If you are interested in having a table top presentation, contact Joe a.s.a.p. since slots are sure to go fast given the attractiveness of this year's format. Call Joe at (510) 426-6811.

Our Chapter's Research Promotion is well on its way, thanks to the leadership and enthusiasm of **Marie Madden**. We all benefit from ASHRAE Research on a daily basis, so please give generously to this worthwhile cause.

Look elsewhere in this issue for announcements of three good seminars. Learning is never ending in our industry.

Gail Brager

DO YOU KNOW A PROSPECTIVE NEW MEMBER, or Have an address change?
 Contact *Membership Chair*:
 Michael Rubio (415) 777-5333
 FAX (415) 641-4413

MAIL, FAX or PHONE NEWS TO:
FOG DISPENSER
 Frank Mayhew, *Editor*
 ECTC Consulting
 3160 Hicks Road
 Sebastopol, CA 95472
 Telephone (707) 824-9381
 FAX (707) 824-9382

FOG DISPENSER DEADLINES	
Meeting Dates	Copy Deadlines
April 6, 1995	March 9, 1995
May 4, 1995	April 9, 1995
June 1, 1995	May 9, 1995

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
 1994-1995 OFFICERS
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 Roy Gifford..... President Elect
 Dennis ThompsonSecretary
 Dan Reiter Treasurer
 Board of Governors
 Ben Sun - Ernie French - Rick Paillon

ASHRAE GOLDEN GATE CHAPTER 1994-1995 COMMITTEES AND CHAIRPERSONS		
Attendance..... Richard Charles	Awards..... Jack Kniveton	Auditing..... Hank Mouw
BAEC..... Tom Reinarts	Code..... Bob Voelz	CRC Action..... Roy Gifford
Education..... Mark Hydeman	Energy & Tech..... Peter Turnbull	Fog Dispenser..... Frank Mayhew
Golf..... Mark Luckes	Government Affairs..... Jon Wintermeyer	Historian..... Hank Mouw
Honor Roll..... Tom Reinarts	Marble Game..... Tim Provo	Membership..... Michael Rubio
Product Show..... Joe Olivier	PAOE..... Rick Paillon	Program..... Roy Gifford
Publicity..... Rachel Murray	Reception..... Steve Doberstein	Refrigeration..... Jim Davis
Research..... Marie Madden	Roster..... Tim Provo	Scholarship..... Matt McMahon
Seminar..... Mike Morehead	Tennis..... Rich Leao	

Indoor Air Quality Problems

A practical "hands on" workshop will be presented by **Francis J. "Bud" Offermann, PE, CIH**. April 17th & 18th 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: John Howard, IEE Seminars
 1448 Pine Street, Suite 103
 San Francisco, CA 94109
 Phone:(415) 567-7700

Fee: \$785 (\$685 for ASHRAE, AIHA & BOMA)

ASHRAE Goes CD ROM

ASHRAE is planning to release an electronic database using the CD-ROM format. A demo version will soon be available to the Golden Gate Chapter and the Society would like your comments and suggestions on the future product.

If you are interested in reviewing the demo CD please contact **Ben Sun** at Flack & Kurtz (415) 398-3833.

CADD Program at ROSENBERG SCHOOL

Employers, looking for CADD operators or design engineering staff? The Rosenberg School, a non-profit training center in advanced CADD and production techniques(AutoCAD R.12 and Intergraphs Microstatic 5.0) has graduates with 5-10 years experience in HVAC engineering. Contact Cyndi Cravens at (415) 391-3600 for more information or to list jobs. All job listings, referral and placement services are provided free of charge.

SALES CAREER OPPORTUNITY

Excellent career position open for sales person to call on key accounts in the Bay Area. Ideal candidate will be consistent, intelligent, diligent, with attention to detail. Good engineering background required. Contact:
Joe Schauf
 Baltimore Aircoil and Systecon
 (408) 866-0723

Have to read your neighbor's Fog Dispenser?
 Want to be part of the "in crowd"?
 Contact **Mike Rubio**, Membership Chair
 415)777-5333

Mechanical Engineer

Affiliated Engineers is a mechanical/electrical 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 3 years experience. Central Utility Plant and laboratory systems design experience required. EOE. Send resume to:
Affiliated Engineers
 1646 N. California Blvd. Suite 210
 Walnut Creek, CA 94596

**ASPE Presents Seminar
 CENTRAL PLANT DESIGN
 March 8th**

The American Society of Plumbing Engineers is sponsoring a seminar on central plant design. It will be held at Scott's Seafood Restaurant at Jack London Square in Oakland, on March 8 at 3:00 PM. The speaker is **Bob Polizzi** of California Hydronics. The cost of the seminar will be \$50.00 including dinner, served at 6:00 PM.

Contact: **Henry Razouk**
 Razouk Engineering
 Phone:(707) 525-9456
 FAX: (707) 525-9884

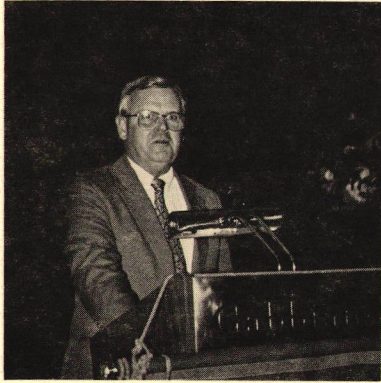
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HVAC Controls positions and HVAC Mechanical Positions available now. Our client companies are in need of exceptional, self-motivated individuals to fill key positions in the Commercial Marketplace. Northern California-Project Engineers, Design Engineers, System Specialists, Engineering Assistants and System Sales. Southern California-Project Manager, System Specialists, Energy Engineer and System Sales. Competitive salary and benefits. Qualified candidates call Julie Amcotts, HVAC Search Consultant at Search West (415) 788-1770.

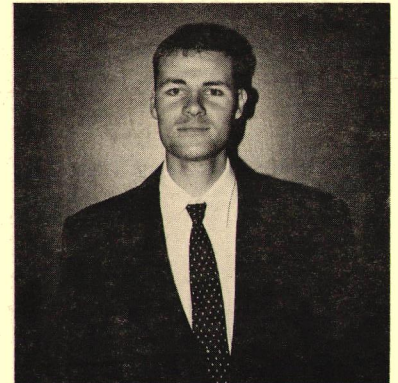
February 2, 1995 Golden Gate Chapter Meeting



**Refrigeration Chair,
Jim Davis, describes
the March Meeting.**



**Engineer's Week Chair,
Jim Brugger, receives
the Chapter Certificate
of Appreciation**



**Congratulations to New
Member, Dave West**



**Celebrating Engineer's Week - February 19-25, 1995
Engineers Have More Fun!**

MINUTES February 2, 1995

Meeting was called to order at 7:35 PM.

January meeting minutes were approved by **Carl Jordan** with a second by **Frank Mayhew**.

-Norman Wright Company was recognized, again, for exceptional attendance with six people at the meeting.

-The chapter participated in a moment of silence in memory of **Michael Rhea**. Michael was killed on January 3 when his private plane crashed in the Tehachapi mountains. He is survived by his wife, Lorri, and a 14 year old son, David. A college trust fund has been established for David. Those wishing to make donations can contact Geoffrey Bell, LBL (510) 486-4626.

-Gail Brager gave an update on **Roy Gifford**. His doctors say he is progressing well and they expect full recovery. Roy sends his thanks to everyone for their support.

-Marie Madden (Research Chair) announced the latest Research donations by acknowledging \$500 gifts from **Flack + Kurtz** and **Tom Gilbertson & Associates**.

-Jim Brigger was given a Chapter Appreciation Award for his work with the National Engineer's Week activities. He announced one of the key activities will be a workshop at the Lawrence Hall of Science on Saturday February 25.

-Joe Olivier (Product Show Chair) announced the "Painless" Product Show to be held at the April meeting. This proves to be a unique approach and there will be more information to follow.

-Mike Morehead (Seminar Chair) announced the details for a two-part Seminar to be held at the PG&E Energy Center. The topic will be "*Smoke Control in Commercial Buildings*" and will feature Mike Dillon as the key speaker at the April 27 session. Call Mike for details.

-Dick Charles and **Frank Mayhew** gave us a synopsis of the highly successful ASHRAE Winter Meeting in Chicago. The exposition was the largest one ever and the Technical Committee meetings provided some lively discussions.

-Jim Davis (Refrigeration Chair) announced the program for the March meeting. There will be a Refrigeration theme with a panel discussion format featuring **Dale Missimer**, PolyCold and **Schlomo Rosenfeld** as facilitators. A pre-dinner technical discussion will address unique refrigeration applications.

-The chapter acknowledged **Bob Voelz** for spearheading the effort with the Centennial Historical Report in this months' *Fog Dispenser*.

-URGENT!!! In order for the chapter to keep food cost in line, we must have reservations in on time. A FAX form is included in the *Fog Dispenser* and members are urged to get reservations in on time.

The program speaker was **Steve Taylor**, The Linford Company. Steve is a member of the Technical Committee on IAQ and Building Ventilation Design Standards, TC 62. Steve's presentation of "What's New With 62?" was fresh from the Winter Meeting and very informative.

-Meeting was adjourned at 9:20 PM.

Respectfully submitted, Dennis Thompson

NEW MEMBERS

The Golden Gate ASHRAE Chapter welcomes the following new members:

Kent Kawkami.....	Bell Products
David West.....	E.B. Ward
Tony Loretelli.....	E.B. Ward
John Anderson.....	E.B. Ward
Tom Webster.....	Energyline Systems
Dev Singh.....	Greene Engineers

1995 TECHNICAL SEMINAR April 20th and 27th

This year's technical seminar will address "Smoke Control In Buildings". Smoke control features are a key component of a building's mechanical system and the codes and standards governing the design are constantly evolving. This seminar presents a unique opportunity to come up to speed on current codes and standards and learn about state-of-the-art technology and research.

The first session will be on Thursday, April 20th. Several speakers will cover the equipment, design issues, and codes applying to smoke control systems.

The second session on the following Thursday will feature Mr. Michael Dillion of Dillion and Associates. Mr. Dillion, an informative and entertaining speaker, is widely recognized as an expert on smoke control.

Mark your calendars for Thursday, April 20th and 27th from 1:00 to 5:00 PM. Both sessions will be held at the PG&E Energy Center, located at 851 Howard Street, San Francisco.

ASHRAE TECHNICAL SEMINAR

Regions X and XI Chapter's Regional Conference

When: May 4, 1995 7:30 a.m. to 3:00 p.m.
Where: Fairmont Hotel Conference Center - Regency I Room on the "B" Level
140 North Market Street, San Jose, CA USA
Cost: \$95.00 prior to March 31, 1995; \$115.00 at the door; College Students with ID: \$20.00
Includes: 10 Outstanding Speakers, Continental Breakfast (7:00 to 7:30 a.m.), Lunch and Design Manuals

PROGRAM THEME: Better Environments Through ASHRAE

Topic: Low Temperature Air, Thermal Comfort and Indoor Air Quality

Speaker: MR. DAN INT-HOUT, Manager of Research for Titus in Richardson, Texas, USA. He is the author of 25 technical papers and articles on variable air volume systems, acoustics, air diffusion, controls and occupant comfort. He has served as Chairman of ASHRAE Technical Committees on "Physiology and Human Environment," "Indoor Environmental Calculations," "Space Air Diffusion," "Methods of Testing Air Diffusion Performance" and "Air Diffusers." He received the ASHRAE Distinguished Service Award in 1993. Dan will discuss the application, economics and IAQ of low temperature (40-45°F) supply air systems. He will also cover ASHRAE Ventilation Standard 62-89 and Comfort Standard 55-90; compliance and conflicts.

Topic: Integrated Access Floor HVAC

Speaker: MR. ROBERT SHUTE, P.E., President of the Mitchell Partnership Consulting Engineers in Willowdale, Ontario, CANADA. His firm's International list of projects include the Metro Toronto Convention Center, the World Financial Center in New York, the Canary Wharf Central Tower in London and the Shanghai Securities Exchange Building. He has served as a lecturer at Seneca College and the University of Waterloo School of Architecture. In his presentation, Mr. Shute will describe an under-floor supply air design where the floor plenum is used as a cooling reservoir. This concept provides flexibility, control, stability and energy economy through building mass thermal storage. He will describe the learning experiences and design evolution of the York Mills Centre, a Toronto, Ontario, Canada four-phase office project spanning six years in construction.

Topic: Techniques of Supplying Outdoor Air for Today's IAQ Requirements

Speaker: DR. NICK DesCHAMPS, Ph.D., P.E., President and Founder of DesChamps Labs, Inc. in Natural Bridge Station, Virginia, USA. Dr. DesChamps has a Ph.D. in Mechanical Engineering from Virginia Polytechnic Institute and has authored several ASHRAE and SMACNA publications and papers on energy recovery equipment and systems. His talk will cover the application of air-to-air heat exchangers in California and other arid climates, to provide 100% outdoor air to VAV systems for assured IAQ and reduced energy costs. His presentation will include design data taken from a recent *ASHRAE Journal* article entitled "Low Temperature Air with High IAQ for Dry Climates" showing the performance and payback potential of heat recovery and indirect/direct evaporative cooling in the Western United States.

Topic: Laboratory VAV Systems and Safety

Speaker: MR. VICTOR A. NEUMAN, P.E., is Vice-President of Source II Corporation, San Diego, California, USA, providing engineering evaluation and consultation for clients' building laboratory projects. His design experience includes more than 108 laboratory building projects while working as a senior engineer for Earl Walls Associates. He is co-author of ANSI Z9.5, "Laboratory Ventilation," Co-editor of the Laboratories Chapter of the ASHRAE Handbook and the author of over 10 technical papers on laboratory and pharmaceutical building ventilation. He will discuss design considerations for the safe application of VAV supply and exhaust air systems in laboratory HVAC design.

Forum Discussion: "The Sick Building: How to Cure It. Who's at Fault?"

Moderator: MR. CARL H. JORDAN, P.E. is a Consulting Mechanical Engineer, Berkeley, CA, USA, specializing in HVAC systems analysis, investigation and dispute resolution. He is an ASHRAE Fellow and has received awards for his several publications in the *ASHRAE Journal*. His experience includes 15 years as an Associate Partner of Skidmore, Owings & Merrill in San Francisco and the design of over 300 projects.

Panelists: Mr. Clark Bisel, P.E., Principal-in-Charge, Flack & Kurtz Consulting Engineers, San Francisco, CA, USA;
Mr. Bob Linford, Ph.D., P.E., President and CEO of the Linford Company in Oakland, California, USA;
Mr. Francis (Bud) Offerman, P.E., President of Indoor Environmental Engineering in San Francisco, CA, USA;
Mr. John Spassof, Regional Property Manager for Tishman Speyer Properties in San Francisco, CA, USA;
Mr. Gerald Weisbach, FAIA, Esq., Partner of Weisbach Higginbotham, Attorneys at Law, San Francisco, CA, USA.

SPACE IS LIMITED

For an application, please call or FAX Mike Scofield, P.E. of Conservation Mechanical Systems in Sebastopol, CA at:
Phone #: 707-829-2080 FAX #: 707-829-3142

**ASHRAE GOLDEN GATE CHAPTER
DINNER RESERVATION FAX**
For THURSDAY, March 2, 1995

Please send Fax by 12 O'Clock Noon on Monday, February 27, 1995

FAX TO:

Ernie French - Norman S. Wright

FAX: (415)-641-4413

Please call if you have any last minute changes in plans.

Phone: (415)-777-5333

Please cancel your reservation(s) if you cannot attend the meeting.

FROM: DICK CHARLES

COMPANY: C&B ENGINEERS

PHONE: 415 442 0110

Please make 2 reservation(s) for the following people (*fill in names below*):
Please check all boxes for each person attending.

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.

(Do not, under any circumstances, cut along this line until you have read about the seminar on the back!)

Preview of Coming Attractions

March 8

ASPE Central Plant Design Seminar

April 20th and 27th

Golden Gate 1995 Technical Seminar "Smoke Control in Buildings"

April 17-18

Indoor Air Quality Problems Seminar

May 4

ASHRAE Technical Seminar "Better Environments Through ASHRAE"

May 3 thru 6

1995 CRC for Regions X & XI

641 4413



APRIL 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

FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XXXIV * NUMBER 6

APRIL, 1995

MEETING NOTICE

Date: Thursday, April 6, 1995

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. 1st libation 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: Please phone or fax your dinner reservation to **Ernie French** by **Monday, April 3**. A fax form is enclosed for your convenience.

Phone: (415) 777-5333

Fax: (415) 641-4413

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: Historical Highlights
SPEAKERS: Product Show Participants

Participants in the Product Show will be making brief 30-second presentations emphasizing historical anecdotes about their company, products and services. Following the presentations we will announce winners of the Product Show Contest and award the contest prizes.

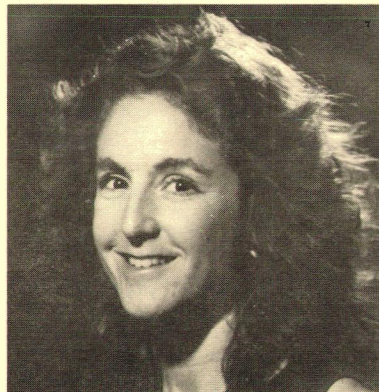
PRODUCT SHOW CONTEST: The goal is to assemble clues in the proper sequence to form the winning phrase. (NOTE: you must be registered for the dinner meeting to be eligible to win). When you arrive at the Product Show, pick up a Product Show Contest Card. Each vendor's booth will have a booth number and a clue for the contest. When you visit each table, write the vendor's clue 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

The roster is finally here! Many thanks to the collective efforts of **Tim Provo, Barbara Dilts, Mike Rubio, Ernie French, and Dan Reiter.** With the ASHRAE Society collecting our dues this year, our membership increased significantly, but the paper path for tracking paid members and address changes was more challenging than expected. Thanks to all of you for your patience - next year will be much easier.

The Board has decided that we need to manage our own database (which is currently being handled by Duplicating Associates), to help facilitate the many activities of our Chapter that rely on this information. **CAN YOU HELP?** We're looking for a computer-competent volunteer to act as our **Database Manager.** Please call me

if you're interested.

Take advantage of our Chapter's activities this month! **Joe Olivier** has been working hard to organize the **Annual Product Show, April 6** at the PG&E Energy Center. This event will also include a Product Show Contest with valuable prizes, and Historical Highlights as part of the evening's program. **Mike Morehead** has put together what is sure to be an excellent **Technical Seminar** on Fire and Smoke Control, scheduled for April 27th. Make your reservations early - speaker Mike Dillon is known to draw a large crowd.

Mark your calendar and start making plans to attend this year's **CRC, May 3-6** in San Jose. (*Do you know the way to San Jose???* ed.) **Mike Scofield** has organized an outstanding Technical Seminar "Better Environments Through ASHRAE" for Thursday, May 4. Many of our own members will be involved in the afternoon Forum, including **Carl Jordan** as Moderator, and **Clark Bisel, Bob Linford, and Bud Offerman** as panelists.

If you have any suggestions for ways to improve Society or Chapter operations that we can present as motions at the CRC, please contact me by April 1. The CRC is also an opportunity for our Chapter to nominate our members for the numerous ASHRAE awards. Please let me know if you have any recommendations!

Gail Brager

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

Contact *Membership Chair:*
Michael Rubio (415) 777-5333
FAX (415) 641-4413

MAIL, FAX or PHONE NEWS TO:
FOG DISPENSER

Sigafoos Shagnasty Mottley III, *Editor*
c/o ECTC Consulting
3160 Hicks Road
Sebastopol, CA 95472
Telephone (707) 824-9381
FAX (707) 824-9382

FOG DISPENSER DEADLINES

Meeting Dates Copy Deadlines

May 4, 1995 ----- April 9, 1995
June 1, 1995 ----- May 9, 1995

Only two more to go!

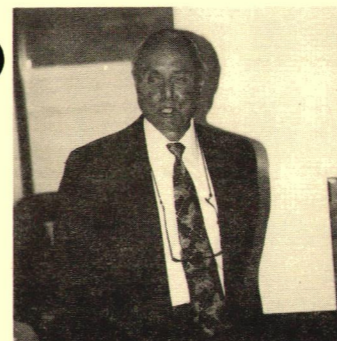
Published monthly, October through June, by the GOLDEN GATE CHAPTER OF THE AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, c/o Duplicating Associates, 370 Brannan Street, San Francisco, CA 94107
1994-1995 OFFICERS

Gail BragerPresident
Roy Gifford..... President Elect
Dennis ThompsonSecretary
Dan Reiter Treasurer
Board of Governors
Ben Sun - Ernie French - Rick Paillon

ASHRAE GOLDEN GATE CHAPTER 1994-1995 COMMITTEES AND CHAIRPERSONS

Attendance..... Richard Charles	Awards.....Jack Kniveton	Auditing.....Hank Mouw
BAEC.....Tom Reinarts	Code.....Bob Voelz	CRC Action.....Roy Gifford
Education.....Mark Hydeman	Energy & Tech.....Peter Turnbull	Fog Dispenser.....Frank Mayhew
Golf.....Mark Luckes	Government Affairs.....Jon Wintermeyer	Historian.....Hank Mouw
Honor Roll.....Tom Reinarts	Marble Game.....Tim Provo	Membership.....Michael Rubio
Product Show.....Joe Olivier	PAOE.....Rick Paillon	Program.....Roy Gifford
Publicity.....Rachel Murray	Reception.....Steve Doberstein	Refrigeration.....Jim Davis
Research.....Marie Madden	Roster.....Tim Provo	Scholarship.....Matt McMahon
Seminar.....Mike Morehead	Tennis.....Rich Leao	

March 2, 1995 Golden Gate Chapter Meeting



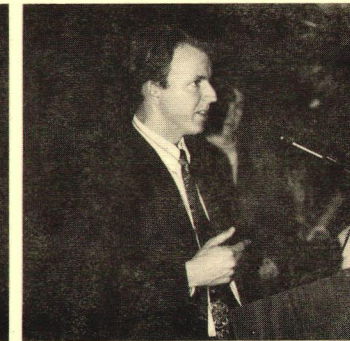
"R" in ASHRAE Technical Seminar Speaker Dale Missimer



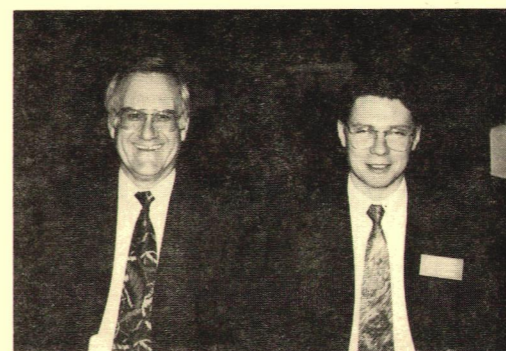
Refrigeration Chair, Jim Davis, receives Chapter Certificate of Appreciation



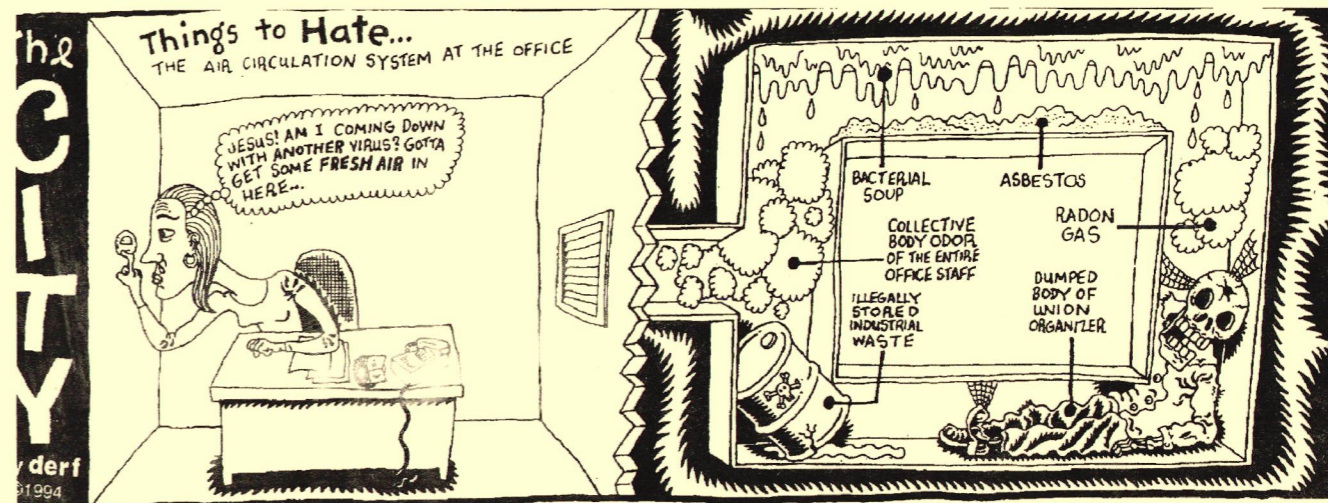
Research Chair, Marie Madden, Receives Chapter Certificate of Appreciation



Technical Chair, Mike Morehead, Describes the April "Smoke Control" Seminar



Cool Cats come out for Cold Storage Speakers



"The Sick Building: How to Cure it. Who's at Fault?" Forum as part of CRC Technical Seminar

FAX ACTIVITIES REPORT PAOE Points -- Publicity

If you have provided educational talks, classes, seminars, legislative testimony, liaisons with government officers or technical reports on any ASHRAE-related topic, please fill in the appropriate information below. We are also interested in learning about any energy or technical awards you have received and appointments to government advisory boards, councils or committees. This should facilitate accurate record-keeping by chairpersons for reports, points and publicity.

Name _____ Subject/Project _____

Presentation/Publication _____

Location/To Whom _____

Award _____ Appointment _____

Comments _____

Please Return the form via FAX to:

Rachel Murray
Charles M. Salter Associates, Inc.
FAX Number (415) 397-0454

(cut here to save FAX paper and phone bill)

Preview of Coming Attractions

April 27

Golden Gate 1995 Technical Seminar "Smoke Control Codes and Practice"

May 4

**No regular meeting - go directly to the CRC meeting.
(DO NOT pass GO DO NOT COLLECT \$200)**

May 4

ASHRAE Technical Seminar "Better Environments Through ASHRAE"

May 3 thru 6

1995 CRC for Regions X & XI

May 11

**Annual Field Trip to Mystery Location
To be announced at April Meeting**

March Golden Gate ASHRAE minutes.

The meeting was called to order at 7:05 PM. The February meeting minutes were approved.

Glumac International and Ted Jacob Engineering were recognized for highest employee attendance. Each company had five employee at the meeting. In addition several companies with 100% employees at the meeting were recognized.

Jim Davis, refrigeration chair, and Marie Madden, research chair, were recognized for their volunteer work.

Mr. Jerry (not related to George) Seifert, Regional X Research Chair indicated that approximately \$64,311 or 37% of the region's Research fund raising has been met. Golden Gate Chapter's goal is \$25,000 by June. Marie Madden announced for \$100.00 donation the donor will receive an ASHRAE key chain. Marie thanked several donors for their donations during the meeting.

Jim Brugger gave a summary of the activities at the National Engineering Week. The Career Night's panel included G.G. Members: Dick Charles, Tom Reinarts, Mark Hydeman, and Jon Bernard of ACCO was also a guest.

Joe Olivier, Product Show Chair give an update on the April 6 product show. (For details see information in this issue).

Mr. Mike Dillon will be the speaker on the April 27 technical seminar on "Smoke Control". This technical seminar is extremely timely since the new 1994 UBC, section 905 has been written and incorporated into the up-coming codes. Contact Mr. Mike Morehead at 415-398-3833.

Mike Scofield announced the program speakers at the Region X CRC meeting and he encouraged members to attend the San Jose meeting on May 4.

Jim Davis announced that McGraw Hill is updating their HVAC handbook and they are looking for volunteers in the industry to review various sections. Contact Jim Davis for more information.

Gail announced that the nominating committee for 1995 will be Barbara Dilts, Tom Reinarts, Tom Gilbertson and Dart Rinefort. Look for the nominated candidates in this issue.

Jim introduced Gary Rugel of Baltimore Aircoil Co. Gary gave a brief history of Thermal Storage Systems for HVAC. TES was started due to utilities' various rates and later incentives. According to ARI information, in 1991

approximately 200 projects were completed in the U.S., and in 1993 approximately 350 projects were completed. Gary indicated that the current TES markets are: Educational Facilities, Owner occupied buildings, Hospitals and Government buildings. BAC believes that other future market areas will include: CFC chiller retrofit and district cooling systems.

Mr. Schlomo Rosenfeld indicated that TES is the only building system conceived and designed to realize a profit by consuming lower cost off-peak energy. He feels that there is insufficient focus on the engineering fundamental of designing TES and that some of the current "non-tes" design tools are insufficient in assisting the TES designer. The fundamental issue such as weather data is a major area of concern. There is lack of weather data to establish an accurate load profile. The designers lack of understanding regarding outdoor design conditions, and daily temperature range can also be an issue. He further indicated that the weather tapes used in computer simulation programs generally use mean or average conditions and may not be accurate for location sensitive TES projects. Schlomo also mentioned other issues such as: economizer operation, hourly cooling load analysis and last on-peak hour TES discharge rate, all need special attention. The designer of TES must remember that TES design philosophy is different from the conventional non-storage system and ASHRAE needs to take the leadership position in addressing these fundamental design issues.

Respectfully submitted, Benjamin Sun

Election Time

The Golden Gate Nominating Committee: Barbara Dilts (Chair), Tom Gilbertson, Rich Leao, Tom Reinarts, and Dart Reinfort. has nominated the following slate of candidates for the Board of Governors:

President-Elect	Dennis Thompson Pacific Coast Trane
Secretary	Dan Reiter Winzler & Kelly
Treasurer	Ernie French Norman S. Wright Co.
Board of Governors (1-Year)	Ben Sun Flack + Kurtz
Board of Governors (2-Year)	Mark Hydeman Pacific Gas & Electric

Each candidate is a member in good standing in the Society and consents to stand for election. Additional nominations of members in good standing, who consent orally or in writing to be candidates, may be made from the floor at the April meeting. A ballot will then be mailed with next month's *Fog Dispenser*.

1995 TECHNICAL SEMINAR

April 27th

This year's technical seminar will address "Smoke Control In Buildings". Smoke control features are a key component of a building's mechanical system and the codes and standards governing the design are constantly evolving. This seminar presents a unique opportunity to come up to speed on current codes and standards and learn about state-of-the-art technology and research.

The session will be on Thursday April 20th and will feature Mr. Michael Dillon of Dillon and Associates. Mr. Dillon, an informative and entertaining speaker, is widely recognized as an expert on smoke control.

Mark your calendars for Thursday, April 27th from 1:00 to 5:00 PM. The session will be held at the PG&E Energy Center, located at 851 Howard Street, San Francisco.

Member Accomplishments

Mike Scofield, Conservation Mechanical Systems, co-authored a paper entitled "Low Temperature Air with High IAQ for Dry Climates" that appeared in *The ASHRAE Journal* (1/95). The authors discuss the use of low temperature supply air and air-to-air heat exchangers to furnish 100% outdoor air with reduced peak energy demands.

Bill Schultz, Phoenix Controls, gave a presentation entitled "Monitoring and Control of Airflow in Isolation Rooms" to the Reno Chapter of ASHRAE (2/95). The presentation covered the issues, standards, design guidelines and solutions for providing ventilation where infectious diseases are present in health care facilities. Recent increases in the number of Mycobacterium tuberculosis (TB) made this a timely topic.

Be sure to tell us of your recent accomplishments so that other Chapter members may learn of your expertise (and, perhaps, earn PAOE points for our chapter) by completing the FAX Activities Report provided in this month's *Fog Dispenser*.

FREE SET OF CODES

Carl Jordan has an extra set of 1992 California Code revisions to the 1991 UBC, UMC, UPC and UFC (a value of over \$200). They are available free to an ASHRAE member who will merely pick them up at Carl's Berserkely office. 510 524-9071

No Meeting on May 4th.
Annual Field Trip on May 11th

**Cal State Hayward Extension Course
Energy Management (EXSP 8095)**

A step-by-step guide for developing an energy conservation program for any existing building. Subjects include: energy use and conservation; energy accounting and analysis; energy surveys and audits; calculating present energy usage; analyzing and evaluating energy conservation opportunities. CSUH Contra Costa Campus

Lecturers: **ANDREA DENVER**, Denver and Associates.
JAMES DAVIS, Mechanical Engineering Consultant.

EMPLOYMENT WANTED

Registered PE in the State of California with 7 years professional experience in HVAC, plumbing design and energy engineering. Bachelors and Masters degrees in mechanical engineering and extensive experience in computer applications for business and engineering. Particularly interested in employment that would allow me the opportunity to develop my knowledge and experience in field trouble-shooting and energy analysis for HVAC systems, including facility management or systems commissioning. Flexible about relocating for the right opportunity. Contact **Richard Nagy** at Climate Mechanical 800 575-5661.

EMPLOYMENT WANTED

Analytical/Technical position sought working for company in Energy Management. Eleven years experience with, and knowledge of HVAC and related equipment troubleshooting, maintenance and repair in a variety of settings including hospitals and government buildings. Knowledgeable in lighting and refrigeration. Experienced writing maintenance procedures. BA Mathematics, U.C. Berkeley. North Bay preferred.

Please contact:

Dorothy Spaet

513 A Street, Santa Rosa, CA 95401

Phone: 707 526-0752 FAX: 707 525-9456

Mechanical Engineer

Position available for a mechanical engineer with two to five years experience performing design functions in a consulting office environment. HVAC, plumbing and process piping experience a must.

Please FAX resume to **PolyTech Associates** at 408 654-9025

CODE CORNER

When the 1991 Uniform Mechanical was issued, the last sentence in Section 1002(a) was modified to not allow exhaust ducts to be run through plenums. Some of the local Building Departments are starting to require the enclosure of exhaust ducts in ceiling return plenums and return air shafts with no regard as to whether the air in the exhaust duct is under positive or negative pressure.

Apparently, the ICBO people recognized this problem and have revised this Section again in the 1994 Uniform Mechanical Code. The duct section has been revised to read as follows:

"601.2 Contamination Prevention. Exhaust ducts, under positive pressure, and venting systems shall not extend into or pass through ducts or plenums. For appliance vents and chimneys, see Chapter 8."

Although the 1994 UMC has not as yet been adopted by the State or the local Building Departments, you may be able to convince reasonable building inspectors that the installation of exhaust ducts that are under negative pressure do not constitute a problem in ceiling plenums or return air shafts.

Submitted by **Bob Voelz**.

Project Manager/Engineer/Estimator

A well-established Mid-Peninsula HVAC construction company is seeking a Project Manager/Engineer/Estimator with a minimum of three years experience. Offering competitive salary and excellent benefits.

FAX resume to: 415 369-2378

ASHRAE CRC GOLF TOURNAMENT

WEDNESDAY, MAY 3, 1995

SANTA CLARA GOLF COURSE

5155 Stars & Stripes

Santa Clara, CA

Phone 408 980-9515

Check in 11:00 AM - 1:00 PM Shotgun Start
Fee: \$95 per person, After April 1, \$110
Make Checks Payable to: **ASHRAE CRC Golf**

For Information Call:

Kathy Johnson or Joel Ergood

415 589-8313

Fee includes: Green fees, Cart, Refreshments, Raffle Prizes and Awards Dinner

**ASHRAE Golden Gate Chapter
ASHRAE HANDBOOK DONATIONS**

Atma Advani, Safeway Inc., has started a project of donations of used ASHRAE Handbooks to needy students in third world countries. Last year 60 ASHRAE guide were sent to India, this year 24 were sent to Pakistan.

Thanks to the following donors:

Robert Parks of Park Associates, Cincinnati, OH.

John Cross of Simpson Sheet Metal, Santa Rosa
Debbie Marshall of Paco Pumps, Oakland

Thanks to **Ron Yaffe** and **Chuck Shane** of Tempco who received, packed and shipped them. Thanks to **Rick Bagwell** of Halton Company, who paid for the shipping to Pakistan.

Atma Advani requests the rest of you to send your spare handbooks (not older than 1980) to Tempco for collection and shipping:

Address: Tempco Equipment Co., Inc.

100 North Hill Drive 412

P.O. Box 400

Brisbane, CA 94005

To complete the goal of sending 1,000 guides to 15 different countries, we also need new donors to pay for shipping (approximate cost \$250).

For more information contact Atma Advani at 510 891-3495.

ASHRAE CRC

Technical Seminar

May 4, 1995

7:30 AM (yawn) to 3:00 PM

San Jose Fairmont Hotel

\$95 before 3/31/95--\$115 at the door

Students \$20

10 Speakers-Continental Breakfast (7:00-7:30)

Lunch - Design Manuals

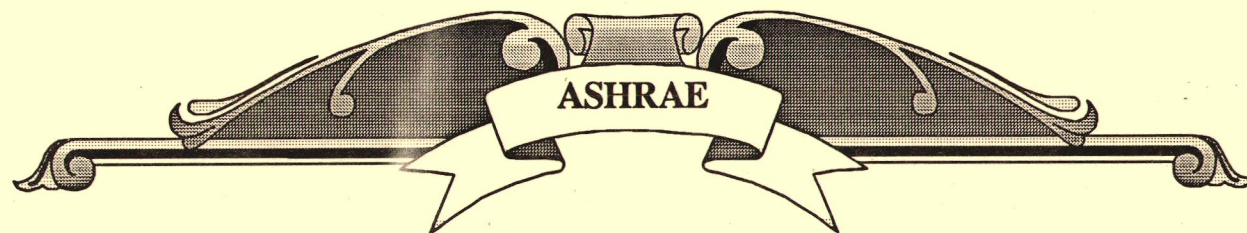
7:30 a.m. **Low Temperature Air, Thermal Comfort and Indoor Air Quality** Mr. Dan Int-Hout

8:45 a.m. **Integrated Access Floor HVAC** Mr. Robert Shute, P.E.

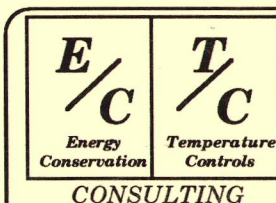
10:15 a.m. **Techniques of Supplying Outdoor Air for Today's IAQ Requirements** Mr. Nick DesChamps, PhDm P.E.

11:30 a.m. **Laboratory VAV Systems and Safety**

1:30 p.m. **Forum "The Sick Building: How to Cure it. Who's at Fault?"**



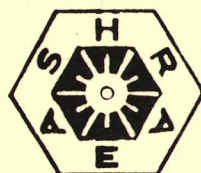
JUNE HONOR ROLL



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
C&B CONSULTING ENGINEERS
150 SPEAR STREET #500
SAN FRANCISCO CA 94105
C

FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XXXIV * NUMBER 9

June, 1995

Meeting NOTICE
Date: Thursday, June 1, 1995

Social Hour: 5:30 p.m. (Happy hour beverages downstairs, be happy, that's an order!!!)

Dinner: 6:30 p.m.

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

Cost: \$27.00

To Reserve: Please phone or fax your dinner reservation to **Ernie French by Monday, May 29**. A fax form is enclosed for your convenience.

Phone: (415) 777-5333
FAX: (415) 641-4413

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 (there is a change machine in the center strip parking area). Valet parking is also available for \$4.25.

NEW MEMBERS

The Golden Gate ASHRAE Chapter welcomes the following new members:

Jose Nisino.....Independent
Bob Polizzi.....California Hydronics
Dave Cook.....Chevron Research and Technical
Robert Tomlinson.....Ajmani and Pamidi
Danny Worley.....Ajmani and Pamidi

JUNE PROGRAM

PROGRAM: ASHRAE Centennial Program
100 Years Ago
In New York City

Guest of Honor
Mrs. Doris Carrier
Daughter-in-law of Dr. Willis Carrier

####

A visit to the Golden Gate Chapter by
Four ASHVE Pioneers
A Historical Re-enactment

####

Unveiling of ASHRAE's Time Capsule, to be opened at our Bi-Centennial in 2095

####

Don't miss the special "Capsule Picture"
Black Tie Optional

####

The Time Capsule is stainless steel, hermetically sealed and will be stored in the foundation of the newly renovated Hotel Monaco in San Francisco. Suggestions are still needed to fill the time capsule with representative items from our era of ASHRAE.

####

BRING YOUR SPOUSE (OR SPICE)!

####

Sponsor an engineer, from the former Soviet Union, for this meeting.



PRESIDENT'S MESSAGE

Looking back over my year as President of the Golden Gate Chapter, I feel both proud and humbled. It is all of you, our members, who make our Chapter thrive. So many of you have contributed your time, ideas, enthusiasm, and talent towards the activities of the Chapter. I thank you for that. During the June meeting, we will summarize the year's highlights and give recognition to the many members who helped make them happen. Please join us.

My first column of the year outlined several goals I had for our Chapter, and thanks to people's collective efforts, I can say that I am delighted with what we have accomplished. In particular,

the Society dues collection program was extremely successful, and substantially increased our membership base.

In our seven of nine chapter meetings, at least some portion focused on an historical theme in honor of this year's ASHRAE Centennial. Our final meeting, in particular, will feature several Centennial events. We also had a special Centennial insert in our February FOG Dispenser.

With regard to overall Chapter Operations, the Board developed an expanded Chapter Operations Calendar to assist us with planning the monthly Board and committee tasks. Board liaisons have also played a stronger role with their respective committees, and we have begun a new system for improving and coordination and minimizing the yearly start-up learning curves for new liaisons and committee chairs.

My term as Golden Gate President was a highlight of my year (second only to my other treasured achievement of becoming a new mother!). Although there is not enough room here to thank everyone who deserves it, I especially want to extend my heartfelt gratitude to all of the officers and members of this year's Board of Governors. They have consistently served beyond the call of duty, always with a smile, and have contributed enormously to the joy I have experienced in serving my Chapter. Thank you my friends, for everything.

Gail Brager

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

Contact Membership Chair:
Michael Rubio (415) 777-5333
FAX (415) 641-4413

**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

FOG DISPENSER DEADLINES

Meeting Dates	Copy Deadlines
No more deadlines until September 9, 1995	
See you then!!!	

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Refrigeration..... Jim Davis	Research..... Marie Madden	Roster..... Tim Provo
Scholarship..... Matt McMahon	Seminar..... Mike Morehead	Tennis..... Rich Leao

Project Manager/Engineer

An Oakland based design-build HVAC contractor has an immediate opening available for an experienced Design-Build Project Manager & Engineer. Must have a minimum of seven years experience handling both the design and project management of large commercial design-build projects, High-tech/Biotech type projects preferred.

Applicants will join the existing team of five Project Managers/Engineers, Four Engineers-in-training, three Contract Administrators and seven CAD drafters/piping detailers to handle the continuing growing number of diverse and challenging projects.

Please FAX resume to:
Val Tataciore
The Linford Company
(510) 832-9413

More Did You Know?

Did you know that an ASHRAE paper written by Patrick J. Brooks, of United McGill, reads in part:

"For rectangular elbows with turning vanes, the data show that double-thickness turning vanes are less efficient than single-thickness vanes"

and regarding diffuser drops:
"...round taps with a cushion head may not be beneficial to decreasing the loss coefficient of the tap"

Submitted by Carl Jordan

MEMBER ACCOMPLISHMENTS

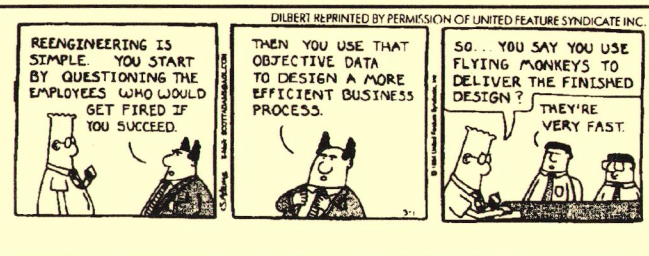
Mike Scofield, Conservation Mechanical Systems, gave a presentation to the seminar for "Commercial Applications For Evaporative Cooling Systems" that was co-sponsored by ASHRAE Inland Empire Chapter, Washington State Energy Office, and Evaporative Cooling Institute (3/95). He spoke about indirect evaporative air conditioning. Also, Mike authored a paper entitled "California -- The Best Place in the Country for VAV Fresh Air Machines" that appeared in *Western HVAC&R News* (4/95).

Be sure to tell us of your recent accomplishments so that other chapter members may learn of your expertise (and perhaps, earn PAOE points for our chapter) by calling Rachel Murray at (415) 397-0442, or by FAX at (415) 397-0454.

Still More Did You Know?

With respect to clearances of gas vents (flues) from combustible materials, did you know that gypsum board is a combustible material? The UBC, UMC, UPC and UBC Standard 4-1 collectively require that a material comply with ASTM E136 in order to be classified "non combustible". Gypsum board *does not comply* with ASTM E136 according to verbal advice of the Gypsum Association, U. S. Gypsum Co., and National Gypsum Association.

Submitted by Carl Jordan



Late breaking news!!! The ASHRAE tennis tournament has been moved to June 2. Call Jack Kniveton at (415) 777-5333 for details...

Minutes of the meeting of May 3, 1995

The May meeting was held on Wednesday, May 3rd and consisted of a tour of the Syntex P-1 Manufacturing Building. Sixty people attended. The tour was lead by Keith Sonberg, Doran Hayes and Norm Hum from Syntex's Facilities Engineering Department.

The tour began by describing that the building has undergone a series of changes since it was initially programmed in 1991. The building was initially built as a manufacturing area, however as the building was being commissioned, Syntex made a corporate decision to move all manufacturing from Palo Alto to Puerto Rico. Six months ago, the facility was reprogrammed as a pilot plant research facility to allow researchers to evaluate different production methods as promising products are "scaled up" from the test tube to production. Shortly after construction began, Syntex was purchased by Hoffman LaRoche of Switzerland, and additional changes were incorporated. The construction was in its final stages of completion when we toured the building.

The tour included a trip through the manufacturing area and a review of the specialized equipment. High pressure ducts served some of the equipment, fitted with fast closing valves to contain explosions.

The mechanical mezzanine included a review of the HVAC equipment supporting this facility.

After the tour, the group re-convened at Gordon-Biersch, the local, exotic bistro, referred to in the May Fog Dispenser. The dinner included a half-liter of Gordon-Biersch's finest....

Respectfully submitted,
Ernie French

EMPLOYMENT WANTED

Analytical/Technical position sought working for company in Energy Management. Eleven years experience with, and knowledge of HVAC and related equipment troubleshooting, maintenance and repair in a variety of settings including hospitals and government buildings. Knowledgeable in lighting and refrigeration. Experienced writing maintenance procedures. BA Mathematics, U.C. Berkeley. North Bay preferred. Please contact:

Dorothy Spaet

513 A Street, Santa Rosa, CA 95401

Phone: 707 526-0752 FAX: 707 525-9496

Centennial Time Capsule for the Golden Gate Chapter

The TIME CAPSULE is awaiting your suggestions!

- Jim Taylor is building a stainless steel, double walled, hermetically sealed capsule for installation in the Hotel Monaco (nee Hotel Bellvue) in San Francisco. The time capsule is 10 inches in diameter and 15 inches long.
- Golden Gate's June meeting will feature the capsule, and a photo for the capsule will be taken at the meeting.
- Please send your suggestions to the Centennial Time Capsule Committee!

Rachel Murray	FAX (415) 397-0454
Dave Attard	FAX (510) 574-0338
Tom Gilbertson	FAX (510) 631-0683
Jim Taylor	FAX (510) 357-9124

We need your ideas to determine what would be, "most important"....."most innovative".....'most representative"..... of the "ASHRAE related technology" that is present today.....that someone would like to be able to tell an ASHRAE member about in 100 years.....when they open the **ASHRAE Golden Gate Time Capsule in 100 years.**

Please sign up if you will agree to be present at the Hotel Monaco when the capsule is opened..... in 2095.

Lend A Hand

Help an HVAC engineer from the former Soviet Union attend a Golden Gate ASHRAE meeting

The San Francisco Jewish Vocational Service (JVS) has been working with HVAC engineers who are refugees from the former Soviet Union, training them with the technical and English skills they need for the American workplace. Most of these people are Jewish and faced religious persecution in Russia and the Ukraine, and many came here without a penny (or kopeck) in their pockets. At this time there are approximately four engineers who would like to participate in ASHRAE meetings, but cannot afford the \$27. **CAN YOU HELP? We're looking for individuals or companies who would be willing to sponsor one of these engineers for the June meeting.** Please indicate your support on the FAX return form, or call Gail Brager at (510) 253-9709.

AVAILABLE

A results oriented successful manager of money, people and time. An experienced hands-on P&L business manager/sales leader with solid accomplishments increasing sales revenue and profits; developing effective teams thru leadership, training and motivation; meeting deadlines on-time thru organization, coordination and communication of goals; experience in building management, maintenance services, industrial distribution, HVAC and control systems for buildings.

B.S. in Business Administration
Contract Arrangements Considered

Ed Schommer

217 Castle Rock Road
Walnut Creek, CA 94598
(510) 930-0345 (Residence-Messages)

Lead Mechanical Engineer/Project Manager

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 seven 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

SENIOR MECHANICAL ENGINEER

Mechanical (HVAC/Plumbing) Engineer with a minimum of ten years experience in the consulting business. The applicant should be licensed (or intending to be), experienced in designing many types of HVAC systems, capable of writing specifications, and able to deal effectively with clients. The successful applicant should be looking for a long term job position with the goal of moving into a position of greater and greater responsibility. Our firm currently employs four engineers and has a total staff of eight. Our specialties include new and remodel projects, laboratory, institutional, office and retail work. This is an excellent opportunity for the right applicant.

Interested applicants should send their resume to:

Lefler Engineering Inc.
1651 Second Street
San Rafael, CA 94901
(415) 456-4220

HVAC Designer

Minimum five years experience.
AUTOCAD experience necessary.

Penry & Associates, Inc.
(510) 631-0290

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

Refrigeration Concepts September 11, 1995
X471 (2 units, 30 hours)

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.

Temperature Controls for HVAC Sept. 13, 1995
X473 (2 units, 30 hours)

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 and integration of controls using Direct Digital Control systems.

Lecturer: **Frank W. Mayhew**, ECTC Consulting

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

Sales Position Available

Inside sales engineer needed for technical HVAC equipment sales. Industry experience necessary. Competitive compensation, excellent benefits and opportunity for personal and financial growth.

Contact:

Ron Yaffe or Doug Herbert
Tempco Equipment Company
(415) 467-8680

Did You Know?

Did you know that the published form of ASHRAE's CLTD/CLF hand method of cooling load calculations has become severely limited? Using Chapter 26, "Air-Conditioning Cooling Load" of the 1989 ASHRAE *Handbook* is for **July Only**. It provides no basis for calculating, for example, winter solar loads on south glass. And, as we know, south glass cooling loads can peak in winter months due to the lower solar attitude, solar radiation more normal to the plane of the glass (higher SHGFs) and the relative ineffectiveness of overhang shading.

Submitted by Carl H. Jordan

**ASHRAE GOLDEN GATE CHAPTER
DINNER RESERVATION FAX**

For THURSDAY, June 1, 1995

Please send Fax by 12 O'clock Noon on Monday, May 29, 1995

FAX TO:

Ernie French - Norman S. Wright

FAX: (415)-641-4413

Please call if you have any last minute changes in plans.

Phone: (415)-777-5333

Please cancel your reservation(s) if you cannot attend the meeting.

FROM: _____

COMPANY: _____

PHONE: _____

Please make _____ reservation(s) for the following people (*fill in names below*):
Please check all boxes for each person attending.

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.

SOVIET ENGINEER SPONSORSHIP

YES, I would like to provide a Soviet Engineer with the opportunity to attend our meeting

I would like to support engineers for the current meeting

I am willing to sponsor _____ engineer(s) at \$27 each.

Signature: _____

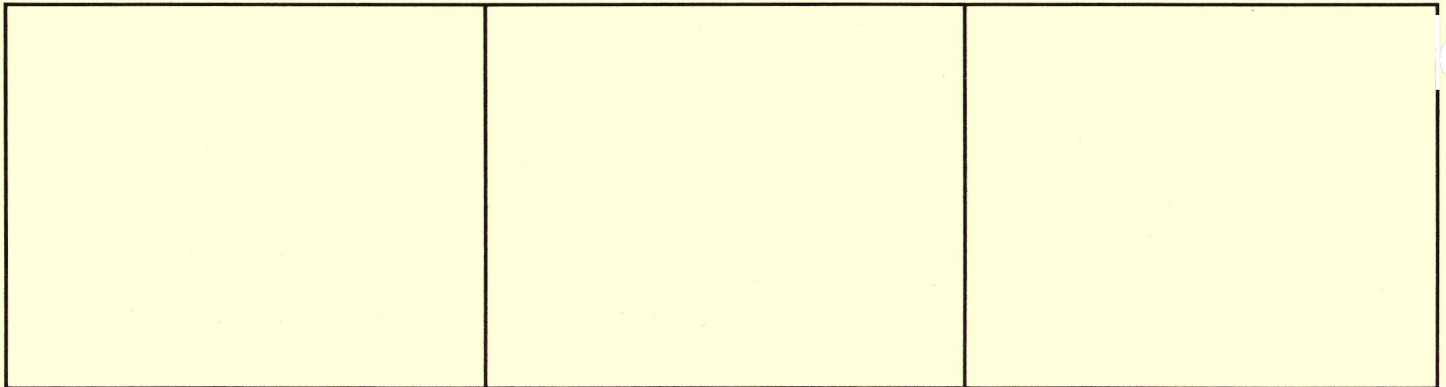
Company: _____ Phone: _____

(Do not, under any circumstances, cut along this line. Does anyone read this???)

Preview of Coming Attractions

June 1

**The last meeting of the year!
See you in October**



Mike Scofield Takes Pictures of the Field Trip, but forgets to put in the film.

Troubletown

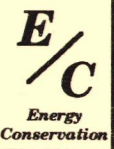
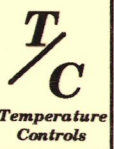
By Lloyd Dangle

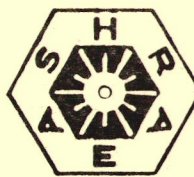


Thanks to Eric Morey for this cartoon!



OCTOBER HONOR ROLL

 E/C Energy Conservation	 T/C Temperature Controls	FRANK W. MAYHEW 3160 Hicks Road Sebastopol, CA 95472 Phone: (707) 824-9381 Fax: (707) 824-9382
CONSULTING Services for Consulting Mechanical Engineers <ul style="list-style-type: none"> •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
 C&B Consulting Engineers
 150 Spear St Ste 500
 San Francisco CA 94105-1537

FOG DISPENSER

Golden Gate Chapter



ASHRAE

VOLUME XXXV * NUMBER 1

October, 1995

Meeting NOTICE
Date: Thursday, October 5, 1995

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 **Ernie French by Monday, February 27**. A fax form is enclosed for your convenience

Phone: (415) 777-5333

FAX: (415) 641-4413

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

October Program

PROGRAM: Air Change Effectiveness (Ventilation Effectiveness)

SPEAKER: Dan Int-Hout III, Manager of Research, Titus Company

Air Change Effectiveness (ACE) is a term that describes what was previously described under the general term "Ventilation Effectiveness". ACE is a term used to describe what happens in occupied spaces, as opposed to air transport and exchange in the rest of the HVAC system.

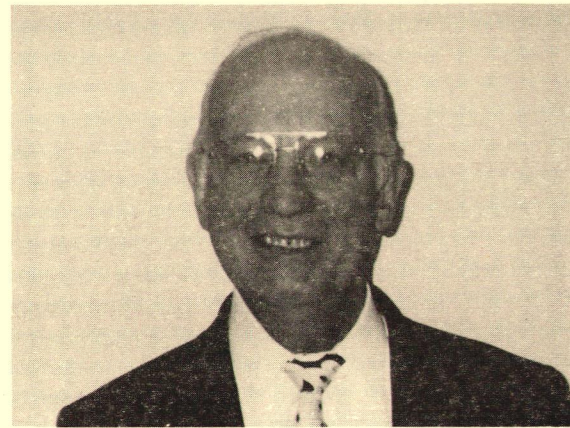
The selection of proper diffuser, air flow rates and supply temperature is the job of the Design Engineer. Other factors also play a significant part in occupant satisfaction, including thermal comfort and acoustics. It is the responsibility of all involved in a project to insure that the resulting environment meets all applicable ASHRAE, ARI, OSHA and other Standards, both at the time of construction and during operation

Mr. Int-Hout holds a B.A. in Physics and Biology from Denison University and a Masters in Business Management from Central. He has chaired or been a member of over 10 ASHRAE Technical Committees and was given the Distinguished Service Award in 1993. He has written over 25 technical papers and articles on variable air volume system performance, acoustics, air diffusion, control and occupant comfort.

NEW MEMBERS

The Golden Gate ASHRAE Chapter welcomes the following new members:

- Loren Loberg..... Loberg Engineering
 - Adrian Mullane..... Hanscomb Associates
 - Jim Solar..... Pipe Shields, Inc.
 - Robert Fansler..... Optimization Marketing Inc.
 - James Dunham.....UCSF
 - Julie Amcotts..... Search West Inc.
 - Mark Kehoe..... Keller & Gannon
 - Matt Costick..... Acutherm
 - David Cook..... Chevron Research
 - Ararjit Cheema..... Independent
 - Tony Loretelli..... Independent
 - Robert Uhl..... Independent
- How about one of your associates name here?
 Call John Small, Membership Chair.



PRESIDENT'S MESSAGE

My mom is really proud of me. She says "President of Golden Gate Chapter of ASHRAE? Not bad for a dirt poor boy from Wyoming!" SHE KEEPS ME HUMBLE!

In all seriousness, I am excited to be serving as your president during the first year of the second century of ASHRAE. Gail Brager did a magnificent job last year and we all owe her a debt of gratitude. If we can do half of the things she managed to accomplish it will be a job well done.

A note of thanks to all. I received many cards, letters and telephone calls, and was the beneficiary of many prayers and good thoughts

from my ASHRAE brothers and sisters. Latest report: The big "C" is in remission, and I am slowly recovering from all the treatments. I especially want to thank the Board for shouldering all of my responsibilities during my absence.

I am looking forward to this year. I know that our dinner meeting attendance would increase if others knew how much fun and companionship they are missing. I can't help but believe that the increase in attendance we saw last year will keep right on going. I would like to see each member get a new member this year.

Our programs get better every year, and just when you think all possible topics have been covered our varied industry comes up with something new that gets us excited again. **Dennis Thompson** is in charge of programs this year, and in keeping with everything that Dennis does, the programs will be super.

The board was thrilled at the response we received from those we asked to serve on the various committees. We feel we have strong representation in every field. Thanks again to the wonderful membership of the Golden Gate Chapter!

See you at the first meeting on October 5th.

Roy Gifford

Fog Dispenser Deadlines

The ninth 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(of Mike): 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

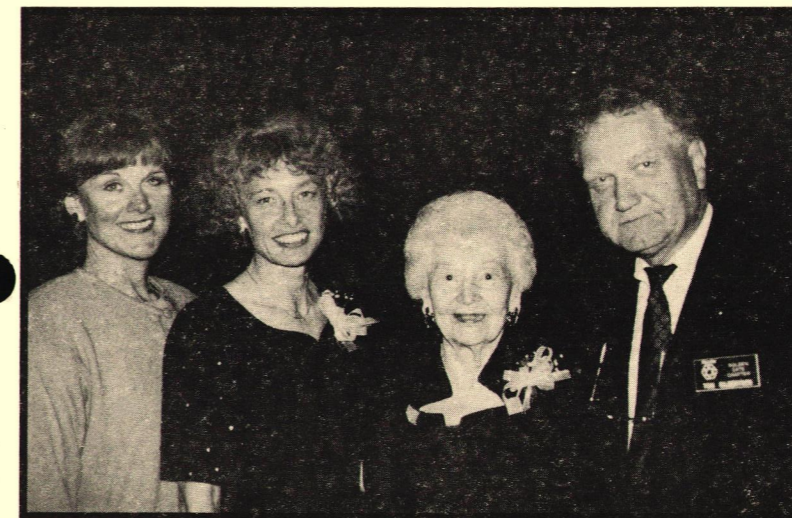
Published monthly, October through June, by the GOLDEN GATE CHAPTER OF THE AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, c/o Duplicating Associates, 370 Brannan Street, San Francisco, CA 94107
1995 --1996 OFFICERS
Roy GiffordPresident
Dennis Thompson.....President-Elect
Dan 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 Mow
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 Mow	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..... Wasii 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	



100 years ago in New York City



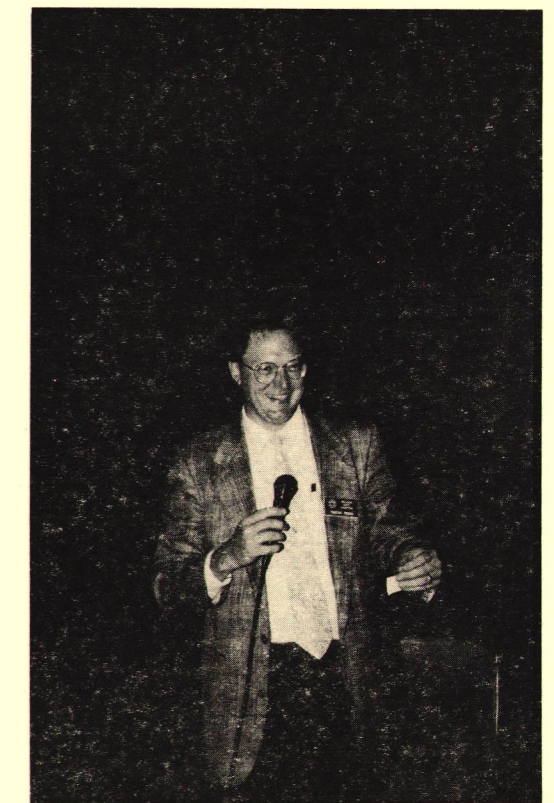
Tom introduces speaker, Mrs. Doris Carrier, and her two daughters



Chapter Certificate of Appreciation Awards for "Jobs Well Done"



Gail passes on the gavel and Charter to Roy



Tim Calls the Winner

MINUTES June 1, 1995

Meeting called to order at 7:35 PM

April Meeting Minutes approved by Ernie French with a second by Tom Gilbertson. There were no minutes for May due to the field trip.

ANNOUNCEMENTS

Guest of Honor. **Mrs. Dorris Carrier**, Daughter-in-Law of the late Willis Carrier was on hand to lend a little bit of nostalgia to the evenings Centennial Theme.

The Chapter acknowledged three Mechanical Engineers from the former Soviet Union as visitors to our chapter. They were **Barry Belenky, Naum Gay and Ana Tsipenyuk**. The guests were sponsored by **Roy Gifford, Bob Levi, and Gail Brager** (et al).

Norman Wright Equipment Company was recognized for their exceptional attendance at this meeting with five people.

The Chapter recognized the **12 Past Presidents** that were in attendance.

The Chapter recognized **Tom White** as the 1936 Charter Member of the Golden Gate Chapter.

Roy Gifford briefed the Chapter on the events of the annual CRC meeting in San Jose. Pacific Rim members did a great job, Golden Gate Chapter motions passed, and we received miscellaneous awards for Historian and Full Circle Honors.

Seminar Chair, **Mike Moorhead**, gave some highlights of this years seminar. Over 70 people attended and the response was good.

Tennis Chair, **Jack Kniveton**, announced the Tennis Tournament set for June 2nd at Harbor Bay.

Golf Chair, **Dennis Thompson**, reminded everyone of the June 8th tournament which has sold out and thanked all of the tournaments sponsors for their support.

Education Chair, **Mark Hydeman**, briefed the chapter on this years education highlights such as UCB involvement with a new HVAC & R program, Engineers' Night and a Lighting Seminar hosted by PG&E set for June 15.

Nominating Committee Chair, **Rick Paillon**, gave this year's election results announcing the election of Mark Hydeman to the Board of Governors and the advancement of all of the existing Board Members.

April meeting was Student Night and we had a full list of sponsors in addition to a 100% turnout.

Marie Madden hosted the awards for this years Research Raffle. Prizes are as follows:

- 1st Prize **Hot Air Balloon Ride-Indoor Environmental Engineering**
- 2nd Prize **Gift Certificates-Tom White, Flack & Kurtz and Jerry Yousey**
- 3rd Prize **Dinner for Two-Gayner, MCA and Tom Gilbertson**
- 4th Prize **Champagne-Ed Arunz, Hank Mouw and Tempco**

NEW BUSINESS

THE BIG WINNER in the final marble draw was **Tom White**. His take was \$372 and he immediately donated half to Research. Thanks Tom!!

CENTENNIAL PROGRAM

A fantastic program of skits was arranged by **Tom Gilbertson**. The mighty ASHRAE Art Players for the skits were Mike Scofield, Frank Mayhew, Ward Clark and Brad Hallihan. Our guest of honor, Dorris Carrier, gave a wonderful speech on the life and times of Dr. Willis Carrier. Items were gathered for the Centennial Time Capsule which will be inserted in a wall in the Bellevue Hotel in San Francisco. Overall it was a wonderful program. Thank you Tom Gilbertson for all your efforts!!!

The chapter recognized all of this year's Committee Chairs. Special Recognition was given to the following list of employers with employees active in chapter affairs:

- Norman S. Wright Equipment Co.** with 5 Employees as Committee Chairs or Officers
- Keller & Gannon** with 4 Employees as Committee Chairs or Officers
- PG&E** with 3 Employees as Committee Chairs or Officers
- Flack & Kurtz** with 2 Employees as Committee Chairs or Officers

Special Recognition was given to the following individuals for their exceptional efforts as Committee Chairs:

- | | | |
|-----------------|---------------|---------------|
| Mike Scofield | Barbara Dilts | Dick Charles |
| Tom Gilbertson | Hank Mouw | Jack Kniveton |
| Marie Madden | Jim Brugger | Mike Rubio |
| Mark Hydeman | Tim Provo | Joe Olivier |
| Mike Moorhead | Bob Voelz | Rachel Murray |
| Dennis Thompson | | Jim Davis |

The official passing of the gavel ceremony was carried out as L.L. Roy Gifford assumed the duties of newly installed Chapter President.

(Continued on Page 4)

(Minutes continued from page 3)

Rick Paillon gave the chapter members a brief reflection on the rewards of service to ASHRAE. Gail Brager highlighted her year with the review of the goals attained by the chapter:

- Increased membership by 35%
- Exciting Programs
- Increased Student Support
- New Table Top Product Show and Seminar
- Increased Research Promotion
- Revised Fog Dispenser
- Centennial Celebration
- The Chapter Operations Calendar

Newly installed **Chapter President, Roy Gifford**, awarded **Gail Brager** with a Chapter Recognition Award which was presented by the ASHRAE Society. Great Work Gail!!

The second order of business by President Gifford was to adjourn the meeting at 9:10 PM.

It's been a great year as secretary, thank you for the opportunity to serve.

Respectfully Submitted,
Dennis Thompson
1994-1995 Chapter Secretary

And Now the Rest of The Story

by Sigafos Shagnassty Motley III

Tom White wins the Marble Draw and Donates half HIS winnings to ASHRAE Research

That is the story that you read in the minutes, but **Do you know the rest of the story???**

Tom and his lovely bride Adele were enjoying a night out at one of Tom's favorite bistros (along with a few of his close personal friends). Tim Provo approaches the table to sell some very valuable raffle tickets. One of Adele's friends buys her a ticket. Well guess what... Adele's ticket is the winning ticket. Sources close to this reporter witnessed Tom grabbing Adele's ticket, and running up to the front as the supposed winner.

The rest is history, Tom draws the right marble, after losing some of his, and wins the \$372 pot. In a fit of generosity, **he** donates half of **Adele's** winnings to ASHRAE research. Well Adele we know the "rest of the story", and this reporter thanks you for your generosity to ASHRAE.

PICNIC TIME

First Annual Golden Gate Chapter Family Picnic

Saturday October 7, 1995

11am to 4pm

Bring the whole family to Tilden Park (Berserkely hills), at the Carousel 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.

CONTROL SYSTEM ENGINEER

CommAir is a Mechanical Services Company. Our Energy Department installs, maintains and services Andover Controls Automation Systems. We have an opening in our Oakland office for a **Programmer/Project Manager /Designer of Automation Systems**. EOE/M/F/DV

Send Resume to:

CommAir / Mechanical Services
1266 14th Street
Oakland, CA 94607
Attention: Tom Staton

Over 100 Members

have paid their local chapter dues when they paid National Dues. This response puts us well on our way to another record year.

If anyone has questions about their dues they may call **Ernie French** at (415) 777-5333, or send a check for \$30 payable to ASHRAE to:

Norman Wright Mechanical Equipment Co.
2398 Jerrold Avenue
San Francisco, CA 94132
Attn: Ernie French

Remember, the Roster will be printed in November this year. The only way to assure your name is included is to pay your Golden Gate Chapter Dues by October 30th.

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

**Refrigeration Concepts September 11, 1995
X471 (2 units, 30 hours)**

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.

**Temperature Controls for HVAC Sept. 20, 1995
X473 (2 units, 30 hours) Note new starting date**

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 and integration of controls using Direct Digital Control systems.

Lecturer: **Frank W. Mayhew**, ECTC Consulting

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

**Energy Information Center
U. S. Department of Energy
Oakland Operations Office**

The Oakland Operations Office is committed to working with the community at large to fulfill its responsibilities for managing the U. S. Department of Energy's research and programmatic activities in the State of California. The Energy Information Center serves as the regional clearinghouse for accessing information and point contacts at the Oakland Operations Office, National Laboratories, and the U. S. Department of Energy complex nation wide.

EIC Hours and Location
Monday Thru Friday 9:00 a.m. to 4:00 p.m.
Oakland Federal Building
1301 Clay Street, Suite N180
Oakland, California 94612
(510) 637-1762

**HANDS-ON WORKSHOP
Diagnosing and Mitigating Indoor Air Quality
Procedures**

Instructor: Francis J. "Bud" Offermann,
PE, CIH
When: November 6 & 7, 1995
Where: San Francisco, CA
Contact: Donald Bauer, 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)

**Future Programs at ASHRAE Golden
Gate Chapter**

Date	Theme	Program	Speaker
Nov 2	Student Night		
Dec 7	Membership	Computerized Tools for Equipment Selection	Mark Hydeman
Jan 4	Research	Building Commissioning	Tom Colvin
Feb 1	Environmental Quality		
Mar 7	Membership Refrigeration	Pre-conditioned Air Systems	Louis Lombardi
Apr 4	Local Students Scholarship		
May 2	Field Trip		
June 6	Spouse Night/Awards		

EMPLOYMENT OPPORTUNITIES

HVAC Controls positions and HVAC Mechanical and Electrical positions available now. My Client companies are in need of exceptional self-motivated individuals to fill key positions in the Commercial/Industrial Marketplace.

Project Managers, Project Engineers, Design Engineers, Engineering Manager, Operations Manager, Performance Contracting Sales and Systems Sales. Also looking for PE's, ME's and EE's with Construction/Contracting background. Competitive Salary and benefits.

Qualified candidates contact:

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

ASHRAE GOLDEN GATE CHAPTER
DINNER RESERVATION FAX

For THURSDAY, October 5, 1995

Please send Fax by 12 O'Clock Noon on Monday, October 2, 1995

FAX TO:

Ernie French - Norman S. Wright

FAX: (415)-641-4413

Please call if you have any last minute changes in plans.

Phone: (415)-777-5333

Please cancel your reservation(s) if you cannot attend the meeting.

FROM: _____

COMPANY: _____

PHONE: _____

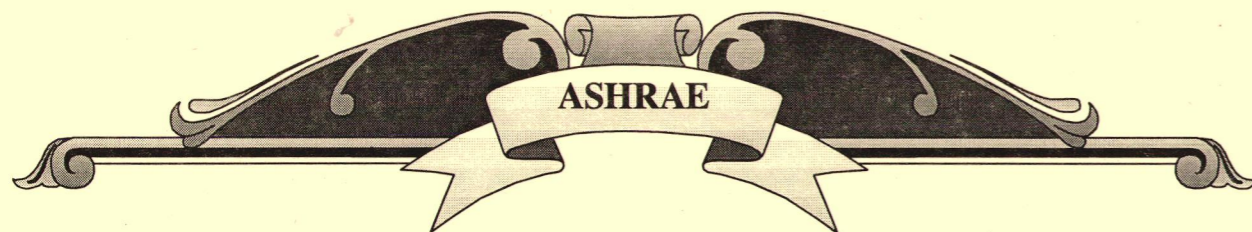
Please make _____ reservation(s) for the following people (fill in names below):
Please check all boxes for each person attending.

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, we think.

(Do not, under any circumstances, cut along this line!)





NOVEMBER HONOR ROLL

Kent M. Lim & Company, Inc.
Sheetmetal & Mechanical Contractor
License No. 471450
1260 Egbert Avenue
San Francisco, CA 94124

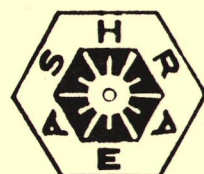


(415) 822-1232
FAX (415) 822-6437

Kent M. Lim
Tony Fung
Chad Chaiyont

Derick Tsang
Tim Shore
Phil Harris

Shirley Lim
Martha Kraft
Sharon Drummond



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 2

November, 1995

Meeting NOTICE

Date: Thursday, November 2, 1995

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, October 30**. A fax form is enclosed for your convenience
Phone: (415) 398-3834, 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.

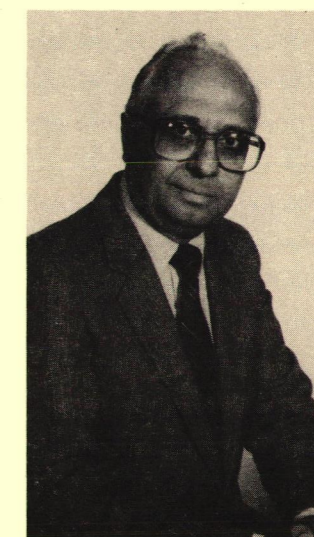
November Program

PROGRAM: **Kitchen Ventilation, Meet the Code and Save Energy**

SPEAKER: **Atma Advani, P. E.**
Chief Mechanical Engineer,
Safeway Inc.

Most people think of kitchen ventilation as only smoke removal. Apart from smoke one has to consider removal of steam, grease vapors, odor and heat and do this at minimal operating and capital costs. Kitchen designs have come a long way from open wood fires to electric grilles and microwave cooking. However, kitchen exhaust requirements have not changed much until recent years.

Mr. Atma Advani, P.E. is our speaker for the November meeting and he will discuss different kitchen hood design, advantages and disadvantages, energy comparisons and economical kitchen HVAC design. Mr. Advani is an ASHRAE Fellow Member and has written numerous articles for the ASHRAE Journal in addition to presenting at many technical seminars and professional meetings.

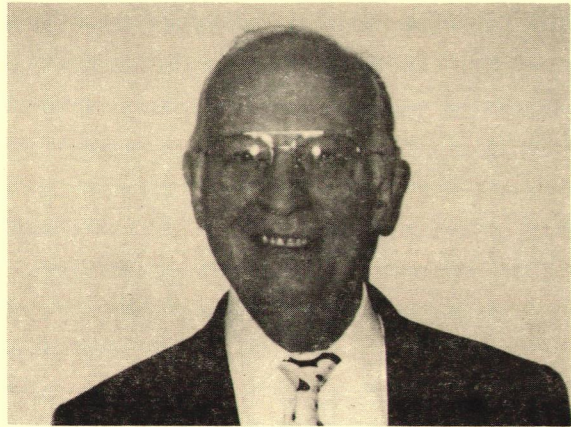


NEW MEMBERS

The Golden Gate ASHRAE Chapter welcomes the following new members:

Roland Chamberland.....Management Recruiters
Mansour Firouzian.....Engineering Network
James Fung.....Stanford Student
How about one of your associates name here?
Call **John Small**, Membership (408) 866-0723

November is **STUDENT NIGHT**, and we will be encouraging students from local schools to attend. Please share this information with any students you know who might be interested. We also invite and encourage you to sponsor students (at \$27 each). Please indicate your support on the FAX reservation form.



PRESIDENT'S MESSAGE

"I had a WONDERFUL day!" When was the last time your spouse said that to you? Well, those were the very first words my wife said when we got home from the Golden Gate Chapter ASHRAE Family Picnic last Saturday. Those of you who didn't make it should surely try to come next year!

The food was excellent! We had plenty of munchy things, and the B-B-Q ran from Tri-tip, chicken and hot dogs down to some wonderful looking sausages which Tim Provo and Ben Sun managed to buy at two different stores. I'm not going to say that Carl Jordan is the best cook in the world, but we discovered that he is the Top Banana in the "Royal Order of Gourmet Hot Dog Chefs of the Western Hemisphere"!

We got to meet wives and husbands whom we had never met before as well as renew acquaintances with those we haven't seen for some years. What a beautiful setting for just sitting and talking with old and new friends while we all watched the children playing and having the time of their lives.

I think for this old grandpa the kids were the most enjoyable. It will never cease to amaze me how fast they all became friends. They were explorers finding new country hidden in the trees, they were pirates sailing a picnic table ship across the bounding main, they were just kids playing with a Frisbee and Adam was a cowboy riding on mommy's shoulders.

The day ended when the rapturous pull of the Merry-go-round became too strong for all of us. We chose our steeds with care. It took three rides for your president to get his fill. I think a picture of Dennis Thompson rearing back on his bucking zebra may replace the silhouette of Stub Farlow in the Wyoming license plate! The only person that didn't ride was Dan Reiter. He said that going up and down while going round and round is too much like his job...

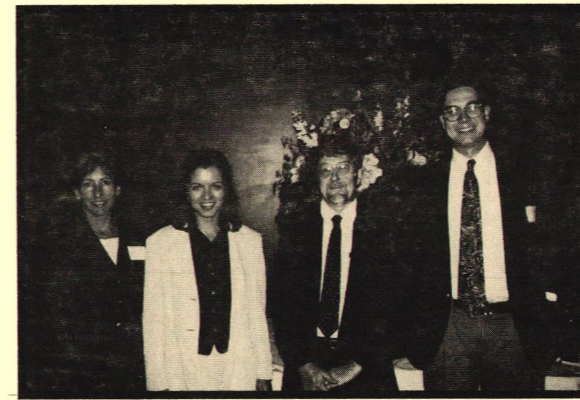
Virginia and I rode the steam train on our way home. It was truly a WONDERFUL day! Hope to see you next year! (and at the November meeting!)

Roy Gifford

First Annual ASHRAE Family Picnic



October 5, 1995 ASHRAE Dinner Meeting



New Members (LtoR) Julie Amcotts, Katerina Bergeron, Loren Loberg and Matt Costick



ASHRAE Chapter Presidents, Present and Past; Roy and Gail

Fog Dispenser Deadlines

The ninth 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

Special Effects 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? Have 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

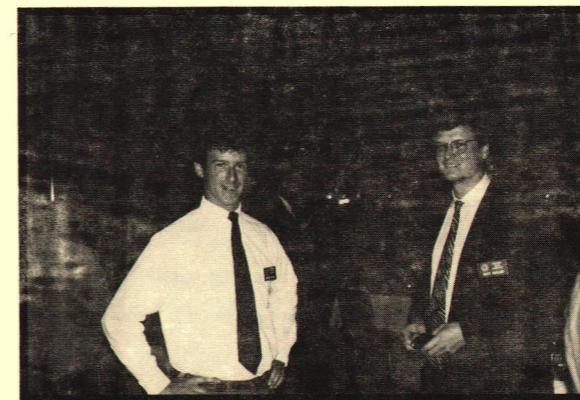
Roy GiffordPresident
Dennis Thompson.....President-Elect
Dan Reiter..... Secretary
Ernie French.....Treasurer
Board of Governors
Ben Sun - Mark Hydeman - Gail Brager

ASHRAE GOLDEN GATE CHAPTER 1995-1996 COMMITTEES AND CHAIRPERSONS

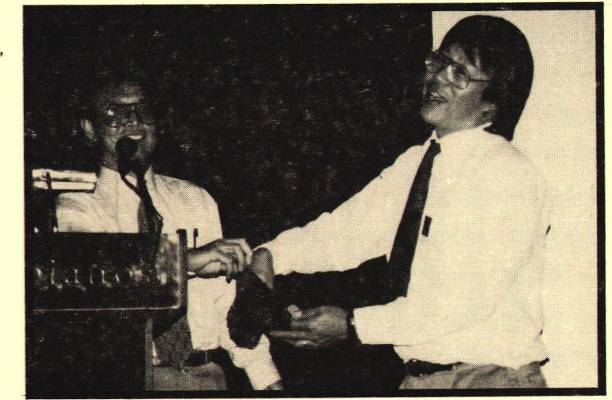
Attendance..... Richard Charles
BAEC..... Tom Reinarts
CRC Action.....Dennis Thompson
Fog Dispenser..... Frank Mayhew
Historian..... Hank Mouw
Membership..... John Small
Program.....Dennis Thompson
Refrigeration.....Jim Davis
Scholarship.....Matt McMahon
Database Manager. Rachel Murray

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.....Ed de Guzman
PAOE..... Gail Brager
Reception.....Wasil Popov
Roster..... Tim Provo
Tennis..... Rich Leao



A free libation? You silver-tongued devil, we accept!!



Please -- not another white marble!

ASHRAE is WIRED

New on ASHRAE OnLine this month is the technical program for the 1996 ASHRAE Winter Meeting in Atlanta. Included are the dates, times, titles and abstracts of the symposia, seminars, forums and technical sessions. In addition, paper titles and authors are included.

ASHRAE OnLine may be accessed through the Internet using the commands **telnet** or **ftp**.

The Internet addresses are:

- **bbs.ashrae.org** for telnet
- **ftp.ashrae.org** for ftp

You may also access the ASHRAE bulletin board by using your modem to dial (404) 235-0228, then follow the prompts. There is no charge from ASHRAE for using ASHRAE OnLine.

Career Opportunities & Executive Placement

Firm specializing in the search, recruitment, placement of estimators, project managers, sales, engineers, executive professionals within HVAC/R, process piping, plumbing & mechanical trades. Also DDC control techs, managers, sales, etc.

Contact: Roland Chamberland
Management Recruiters of Sonoma
765 Baywood Drive, Suite 225
Petaluma, CA 94954
Phone (707) 769-2955
FAX (707) 769-2966

Sales Engineer Pumps

R. F. MacDonald Co., an established leader in the sale of pumps, parts and service to the No. California industrial marketplace is seeking an **Outside Sales Engineer**, based out of our new expanded Hayward facility.

Qualified candidates will have a successful track record, be a team player, self-motivated, and have 3-5 years industrial sales experience, preferably with pumps or related rotating equipment.

Salary and commission plan commensurate with experience. Company offers a competitive benefit package.

Send or FAX Resume with persuasive cover letter to:
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Hayward, CA 94545-3816
Attn: MS 7410
FAX (510) 784-1004

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Spending a lot of time searching through journals for information on chiller systems and refrigerants?

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This Internet on-line library allows you to quickly sort over **2,600 pages** of carefully selected reference materials on chiller systems

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What The Heck Are PAOE Points???

ASHRAE President Richard B. Hayter announced the guidelines for the 1995-96 Presidential Award of Excellence (PAOE) program stressing chapter activities. The activities that get a chapter points are the following:

Membership Promotion The goal will be 1.5% net growth with a maximum delinquency rate of 6%. The goal for advancement in grade of members is 2%.

Chapter Program Activities Points are awarded to chapters who assess program quality on an on-going basis, plan programs in advance and use Society-prepared programs. Bonus points for continuing education programs and Best Chapter Program.

Chapter Meeting Attendance Bonus points for having regularly scheduled summer meetings, joint meetings with related organizations, establishing or maintaining a chapter section.

Research Promotion The chapter norm is \$40 per area assigned member. Bonus points for special research promotion and for achieving more dollars for research than any of the prior five years.

Student Educational Activities, Technical, Energy and Government Activities, Refrigeration are other activities earning points.

MINUTES October 5, 1995

Meeting called to order at 7:35 PM, by President Roy Gifford.

June Meeting Minutes were approved.

ANNOUNCEMENTS

John Small announced the 1st Annual Family Picnic for Saturday, October 7 at Tilden Park. He also let everyone know he is Membership Chair and to call him as needed.

Mark Hydeman announced that 95 were in attendance with the following organizations leading attendance:

Five from **Indoor Environmental**; Five from **Engineered Air**; Six from **Keller & Gannon**; Six from **Norman S. Wright**; 100% of **ECTC Consulting** and other one man offices; and **BOTH Guttman and MacRitchie!!!**

Mike Moorehead talked about ASHRAE Research and solicited donations. Thanks to **PG&E** and **California Hydronics** for their support of Research.

Ernie French-Treasurer reports the 1995 budgets:

\$46,000	Income
\$46,000	Expenses
\$59,000	Actual Income

Membership and golf did help quite a lot. Chapter dues (as collected by Society) was a significant change. **Golden Gate Scholarship** fund has over \$18,000 and awards a \$1,000 scholarship each year. The **Eric Thor Andresen Memorial Fund** has over \$15,000 and awards a \$750 scholarship each year.

President Roy announced the Committee Chairs.

Gail Brager awarded a certificate of appreciation to **John Small, Membership Chair** for putting the picnic together on practically no notice. Gail also spoke about **ASHRAE ADAM** and his energy conservation abilities.

Dennis Thompson talked about the programs this year. He solicited ideas for the month of May's field trip and June meeting.

Tim Provo asked that members notify the Society or himself on roster changes.

Ed DeGuzman held the raffle. **John Small** and **Paul O'Neill** won golf ball sets donated by **Norman S. Wright Company**, after **Rich Leao** had his number drawn and declined the prize. **Schlomo Rosenfeld** and **Craig Thomas** won bottles of wine donated by **Air Treatment Control**. **Ben Sun** won a bottle of wine donated

by **Air Treatment Control** and the marble draw. Alas, Ben drew a black marble.

Dennis Thompson introduced **Dan Int-Hout, Titus**. He spoke on the ACE, air change effectiveness. It was an interesting subject with good questions during and after the presentation.

The meeting was adjourned at 9:30 p.m.

Respectfully Submitted,
Dan Reiter, Chapter Secretary

1st Annual Golden Gate Chapter Picnic Big Success!

by
John Small

For those of you who missed it, the 1st Annual ASHRAE Golden Gate Chapter Family Picnic (1AAGGCFP) came and went. Much fun was had by all. The normally reserved ASHRAE members and their families played games of "full contact Frisbee", hand-to-paw miniature collie wrestling" and "who has the best BBQ tools". Stay tuned in the *Fog Dispenser* to learn more information about next year's event.

Marble Game

by
Edgar DeGuzaman

Last month's marble game was a success. We sold \$215 worth of raffle tickets. This year there is a slight change in the rules. Instead of a 50/50 split, 60% of the handle will go to ASHRAE Research and 40% goes to the prize pot. In addition we will be awarding prizes from various donors. so next meeting we will have \$86 plus that night's pot and prizes.

The October raffle prizes were:

Sal Giglio of Norman S. Wright

2 sets of Greenheck golf balls and tees

Dave Eisenberg, Air Treatment Control

3 bottles of wine

Our sincere thanks to both of these members and their companies. Anyone wishing to donate prizes to further ASHRAE Research, please call Edgar DeGuzman at (415) 594-0182.

ASHRAE 1996 Winter Meeting in Atlanta February 17 - 21

The ASHRAE Winter meeting and the **International Air-Conditioning, Heating, Refrigeration Exposition** will be held at the Georgia World Congress Center and the OMNI Hotel. Registration forms are in ASHRAE Insights. Register early.

**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: RICHARD CHARLES

COMPANY: C&B CONSULTING ENGINEERS **PHONE:** (415) 442-0110

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

RICHARD 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

*Remember - The November 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: _____