

ASHRAE  
GOLDEN GATE CHAPTER  
HONOR ROLL LIST

<u>1975-76</u>	<u>1971-72</u>
Oct 75 Carrier Corporation*	Oct 71 HGP
Nov 75 A.R. Peterson & Sons	Nov 71 York
Dec 75 Sporlan Valve Co.	Dec 71 Climate Conditioning
Jan 76 Columbia Mechanical	Jan 72 Honeywell*
Feb 76 Roth Associates	Feb 72 L&H Air-Co**
Mar 76 Linford Air & Refrig	Mar 72 Tuttle & Bailey
Apr 76 Spartan Associates	Apr 72 Tempco
May 76 Lennox Industries	May 72 -
Jun 76 Industrial Steam, Inc.	Jun 72 -
<u>1974-75</u>	<u>1970-71</u>
Oct 74 Allied Air Products*	Oct 70 Honeywell
Nov 74 Air Filter/Control	Nov 70 Powers Regulator
Dec 74 N.J. Hatter Co.	Dec 70 Robertshaw
Jan 75 E.B. Ward & Co.**	Jan 71 Carrier Corporation*
Feb 75 Industrial Power, Inc.	Mar 71 Frank Olsen Company
Mar 75 Clyde Equipment	Apr 71 G.N. Aronovsky
Apr 75 Vann Engineering*	Apr 71 Wm. Barron
May 75 Engineered Air Systems	May 71 Vann Engineering
Jun 75 Western Plumbing & Htg	Jun 71 L&H Air-Co*
<u>1973-74</u>	<u>1969-70</u>
Oct 73 Valley Sheet Metal	Oct 69 Pameco Air*
Nov 73 N.S. Wright Company	Nov 69 -
Dec 73 R.A. Emerson Company	Dec 69 -
Jan 74 HGP*	Jan 70 L&H Air-Co
Feb 74 Tempco*	Feb 70 Farr Company
Mar 74 Yamas	Mar 70 Dunham Bush
Apr 74 G.N. Aronovsky*	Apr 70 -
May 74 Trane Company	May 70 Johnson Service
Jun 74 E.B. Ward & Co.*	Jun 70 -
<u>1972-73</u>	<u>1969</u>
Oct 72 Pacific Pumping	Jan 69 Aladdin Heating
Nov 72 PG&E	Feb 69 Colan Heating
Dec 72 L&H Air-Co***	Mar 69 Douglas Insulation
Jan 73 Mirov Trane Service	Apr 69 Carrier Corporation
Feb 73 E.B. Ward & Co.	May 69 Pameco Air
Mar 73 L.O. Schueler	
Apr 73 California Hydronics	
May 73 The Brose Company	
Jun 73 R.F. MacDonald Company	

NOTE: Two-time member - \*  
Three-time member - \*\*  
Four-time member - \*\*\*



GOLDEN GATE CHAPTER ASHRAE

VOLUME XVI NO. 1

OCTOBER 1976

MEETING ANNOUNCEMENT

The first meeting of the Golden Gate Chapter for the 1976-77 year will be held at the Engineers' Club on the 16th Floor of the Hong Kong Bank Building, 160 Sansome Street, San Francisco on Thursday, October 7, 1976. The Social Hour will begin at 5:30 PM, with dinner at 6:45 PM.

OCTOBER PROGRAM

Gene Valerio, Chairman

Arranged and moderated by Hank Mouw and Mo Dadci

SUBJECT: KNOW THY FANS

Debate with a panel of well-known fan experts on the application and performance of major types of fans--learn about an unhooused fan and an eight-sided scroll. The program content has been arranged to appeal to contractors, vendors and designers, alike.

PRE-MEETING WORKSHOP

Bill Reeves, Chairman 6:00-6:45 PM  
Upstairs

SUBJECT: ATMOSPHERIC VS. PRESSURIZED DEAERATORS

Mr. John Brose, The Brose Company, representing Industrial Steam Company, will discuss the differences between atmospheric and pressurized deaerators, and where to apply them.

\* NOTICE \* NOTICE \* NOTICE \* NOTICE \* NOTICE \*

THERE WILL BE A RAFFLE OF THE RETURNED RESERVATION CARDS! AND THE ONE PICKED WILL RECEIVE A FREE DINNER FOR THAT NIGHT'S MEETING. SO SEND IN YOUR RESERVATION CARDS EARLY!

CLIMATE DATA HANDBOOK COMMITTEE

The Golden Gate Chapter Climate Data Handbook Committee is now functioning to create a new handbook for the Northern California area. This is the last chance for persons who are interested in working on this Committee, and collecting of weather data for the various cities to make themselves know. Contact Dick Charles, Chairman, at 434-2720.

ROSTER COMMITTEE REPORT

The 1976-1977 Roster Committee, headed by Paul Evans, is now working to compile member information for this year's publication.

Remember, November 1 is the deadline for payment of chapter dues. The Roster "books" close at that time, and those who have not paid will be unable to find their name in the 1977 Roster.

HONOR ROLL

HEAT TRANSFER EQUIPMENT CO. INC.

Factory Representatives

Heating & Hydronic \* Boilers \* Tanks  
Heat Exchangers \* Hot Water Packages \* Pumps  
Steam & Water Specialties

THANK YOU FOR YOUR SUPPORT OF ASHRAE!

20 SOUTH LINDEN AVENUE, SOUTH SAN FRANCISCO, CA 94080 - 415/873-4353

Published monthly 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 94105, 495-4550.

1976 - 1977

**OFFICERS**

Carl H. Jordan . . . . . President  
 Eugene L. Valerio . . . . . Vice President  
 Dick M. Glumac . . . . . Secretary  
 Thomas A. Gilbertson . . . . . Treasurer

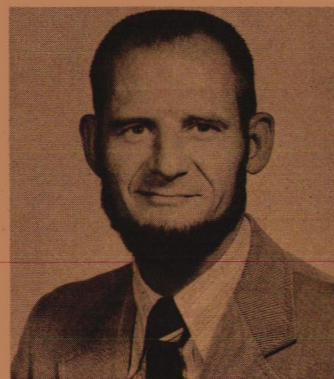
**BOARD OF GOVERNORS**

James M. Holden  
 Bob Phillips  
 Jack A. Palmer



PRESIDENT'S

**CORNER**



CARL H. JORDAN

Dear Members,

Welcome to our 1976-77 year! This is our Society! Let's put into it the equivalent of what we take out of it!

Thanks, Jack Palmer, from the Golden Gate Chapter, for your leadership and friendship last year. You contributed your share and enough for many of the rest of us.

We're already well under way this year. We had a substantial number of volunteers for committee service. All committee chairmanships were willingly accepted by the appointees. Two summer meetings, a number of committee chairmen met with the Board to discuss their committee activities.

Some of our extraordinary activities include (1) an extremely active Solar Energy Committee with six subcommittees; (2) a desire to publish an updated temperature data book for Northern California; and (3) an active series of regular meeting programs planned by the one and only Gene Valerio.

A California Energy Resources Conservation and Development Commission "Publication List" is available from the Commission at 1111 Howe Street, Sacramento, California 95825.

The cost of the dinners at the regular Chapter meetings has been increased to \$7.75 by the Engineers' Club.

The Society is awarding a Fifty Year Membership Certificate to Harry Holbrook. We hope to present the Certificate at a Chapter meeting. Congratulations, Harry!

The California Energy Conservation Standards for New, Non-Residential Buildings, which was to have applied to buildings constructed after February 6, 1977, has been held up by a court injunction. The injunction is subject to appeal. We will have to wait and see.

Get your Chapter dues paid before November 1, in order to get your name published in our 1976-77 Roster.

I would appreciate any of your suggestions regarding Chapter operations and activities. A number of suggestions have already been received and we plan to put them into effect.

CARL H. JORDAN, PRESIDENT

**COPY DEADLINE**

In order to meet our publication dates, we have established the following as the last possible dates that copy for the FOG DISPENSER can be in the editor's hands:

Meeting Date	Copy Deadline
7 OCT 1976	20 SEP 1976
4 NOV 1976	18 OCT 1976
2 DEC 1976	15 NOV 1976
6 JAN 1977	20 DEC 1976
3 FEB 1977	17 JAN 1977
3 MAR 1977	14 FEB 1977
7 APR 1977	21 MAY 1977
7 MAY 1977	18 APR 1977
2 JUN 1977	16 MAY 1977

**KNOW A PROSPECTIVE NEW MEMBER?**

Contact Membership Chairman:

Jim Nemechek . . . . .415/648-0646

or Committee Members:

Chuck McLaughlin . . . . .415/326-9115

Bob Phillips . . . . .415/362-6065

**MAIL OR PHONE NEWS TO:**

Nick Dann, Editor  
 FOG DISPENSER  
 337 Roebling Road  
 So. San Francisco, CA 94080  
 (415) 873-1660

**MINUTES - GENERAL MEETING JUNE 3, 1976**

...continued

1. President Palmer opened the meeting at 7:45 PM in the Engineers Club of San Francisco with a call for self-introductions.
2. Minutes of the April 1 meeting approved. No regular meeting was held in May because of the Annual Social held on May 1.
3. Steve Sprague, who represents the Chapter in the BSCMT board, explained their program and presented completion certificates to Fred Palia, who works for George Wilson, and Ricky Uno, whose certificate was accepted by Dick Cerbatos, the employer-sponsor. Howard Rideau, a director of ESCMT, expressed his thanks to the chapter for its support of the program which is working, having trained 250 persons since its inception.
4. Carl Jordan reported on the Region X CRC Meeting in Anaheim, attended by five Chapter members. His report covered the status of last year's motions, 90-75 seminar funds, and the motions advanced by the chapter this year, plus mention of those members nominated for awards or committee posts.
5. Palmer announced that Richard Charles has been appointed chairman of the Weather Data Committee and he asked for committee members.
6. Don Bryant announced an Education Seminar to be held in Seattle at the National Meeting. A workshop will follow, subject: Training of Technical People in the Industry. Bryant asked for comments to take to Seattle.
7. Dick Friedman expressed his displeasure with ASHRAE Headquarters' intrusion into a California political issue and the Board's action in including the Proposition 15 Nuclear Initiative letter in the latest FOG DISPENSER. He proposed a motion, and it was seconded, as follows: "National Headquarters should be censured by the Golden Gate Chapter for disseminating the letter and explanation concerning the California Nuclear Initiative."  
 After discussion a handcount was made. The motion narrowly failed 27 to 25.
8. Palmer then introduced Carl Jordan as the 76-77 President and passed to him the large gavel and the Charters of the ASHVE and ASRE Chapters.

9. Jordan then presented Palmer with a Certificate of Appreciation and a Past President's Pin.
10. After a recess Pete Filios spoke about the Great Golf Day, and Jordan asked for further response to his call for committee volunteers.
11. The meeting was named Past Presidents' Night and 18 past presidents and their wives were guests of the Chapter. Jordan introduced each and asked them for brief comments. Those responding included Messrs. Bentley, Duncan, Ballard, Simonson, Kniveton, Friedman, Gendler, Pollock, Charles, White, Crouch, Cusing and Baldwin. Others present included Messrs. Guttman, Pribuss, Voelz, Aronovsky, and Alger.
12. With thanks to the past presidents, Jordan adjourned the meeting until the next scheduled one in October.

Respectfully submitted,  
 Eugene L. Valerio  
 Secretary

**PLEASE PAY YOUR DUES**

Golden Gate Chapter ASHRAE dues notices have been mailed. If you did not receive your notice, please contact the chapter.

Payment deadline is November 1. To insure that your name is listed in the 1977 Roster, and to receive your copy of FOG DISPENSER in the months ahead, please send your check today.

Continued next column...

ASHRAE GOLDEN GATE CHAPTER  
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COMMITTEE CHAIRMEN 1976-77

<u>Committee</u>	<u>Chairman</u>	<u>Board Liaison</u>
Membership Program	Jim Nemechek	Glumac
Pre-Meeting Workshop	Gene Valerio	Valerio
Golf Tournament	Bill Reeves	Valerio
Tennis Tournament	Pete Filios	Holden
Social	Dave Rifkin	Holden
Fog Dispenser	Jerry Kechter	Valerio
Honor Roll	Nick Dann	Gilbertson
Roster	Nick Dann	Gilbertson
Temperature Data	Paul Evans	Holden
Scholarships	Dick Charles	Phillips
Research	Vic Bach	Glumac
Seminar	Bernie Beckius	Gilbertson
Energy Conservation	Jim Taylor	Gilbertson
Solar Energy	Kevin Dowling	Glumac
Publicity	Tom Collins	Phillips
Raffle	Dave Attard	Palmer
ESCMT	Dick Porter	Holden
Engineers Joint Council	Don Bryant	Phillips
	Tom Reinarts	Holden
	Jim Holden	
Code	Dart Rinefort	Glumac
	Tom Campbell	
Reception/Attendance	Bill Shultz	Palmer
Honors & Awards	Jack Palmer	Palmer
Education	Roy Anderson	Phillips
Historian	Roy Gifford	Palmer
Nominating	Charles Hardeman	Palmer
	Lew Pollock	
	Irving Alger	
	Dick Charles	
	Jack Palmer	
	Carl Jordan	
Audit 1975-76	Dart Rinefort	Gilbertson
	Hank Mouw	
	Cal Laws	
Audit 1976-77	To be elected	Holden
CRC	Gene Valerio	Valerio/
	Dick Glumac	Glumac



GOLDEN GATE CHAPTER



ASHRAE

VOLUME XVI NO. 2

NOVEMBER 1976

MEETING ANNOUNCEMENT

The second meeting of the Golden Gate Chapter for the 1976-77 year will be held at the Engineers' Club on the 16th Floor of the Hong Kong Bank Building, 160 Sansome Street, San Francisco on Thursday, November 4, 1976. The Social Hour will begin at 5:30 PM, with dinner at 6:45 PM.

NOVEMBER PROGRAM

Gene Valerio, Chairman

SUBJECT: VAV AND HIGH VELOCITY DESIGN

SPEAKER: James A. Reese, President of Temperature Industries (Tempmaster)

Mr. Reese is a nationally-recognized authority on VAV systems. His presentation will cover the application of acoustic fundamentals in high velocity design, and how to avoid the design pitfalls of variable air volume systems.

PRE-MEETING WORKSHOP

Bill Reeves, Chairman

6:00-6:45 PM  
Upstairs

SUBJECT: AIR CONTROL FOR HYDRONIC SYSTEMS

This month's workshop will be presented by California Hydronics Company. The discussion on air control for hydronic systems will be geared for the younger engineer, but the more experienced engineer is welcome to share his experience and problems. The discussion and exchange of ideas should be of interest to all.

ASPE HOSTING SAN FRANCISCO CONVENTION/EXPOSITION

The American Society of Plumbing Engineers will hold its fifth biennial Engineered Plumbing Exposition and Convention in San Francisco. Interested ASHRAE members are urged to participate.

The Convention will be held from November 7-11 at the San Francisco Hyatt Regency. Four technical sessions will be conducted:

- 1st Technical Session - Model Plumbing Code
- 2nd Technical Session - The Engineer & the Consumer
- 3rd Technical Session - Conservation of Natural Resources
- 4th Technical Session - Developments in Plumbing Engineering

The Exposition will be held at Brooks Hall in San Francisco November 9-10.

Further information may be obtained by contacting Calvin Laws at SOM, or Harry Happ, ASPE Western Coordinator, at 1080 O'Brien Drive, Menlo Park, CA 94025.

RENO WORKSHOP PLANNED FOR MARCH

Plans are underway for a Metrication Workshop to be held in Reno the first or second weekend of March, instead of our usual Wife's Night meeting. We'll travel in special rail cars as part of the Reno Fun Train leaving Friday evening and returning Sunday evening. More details later, but promise your wife now that you'll take her!

HONOR ROLL

GAMBLE INSTRUMENT SALES

Process and Water Treatment Instrumentation  
Art Gamble

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1976 - 1977

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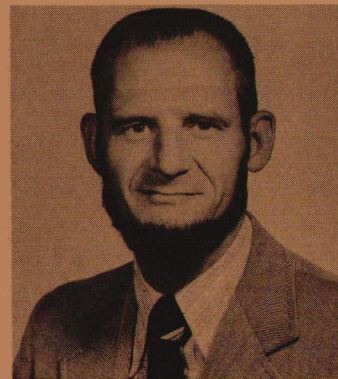
**BOARD OF GOVERNORS**

James M. Holden  
Bob Phillips  
Jack A. Palmer



PRESIDENT'S

**CORNER**



CARL H. JORDAN

Dear Members,

This meeting is "New Member and Student Night." Invite a friend and encourage him to join the Society. Air conditioning students from Cal Poly and from City College will be our guests. Welcome, students!

Mr. and Mrs. Richard Perry will also visit our meeting. Dick is Chairman of our Region X. Welcome to San Francisco Perrys!

If you paid your dues by November 1, your name will be in the Roster, and you will continue to receive the Fog Dispenser. If not, the Fog Dispenser will continue only after your dues are paid.

Remember the importance of sending in your dinner reservation card before each meeting. Proper meal planning can only be done with a good reservation count in advance.

I was quite serious last month when I suggested the Chapter start thinking about metrication. I envision that this should be done through a new Chapter Metrication Committee comprised of engineers, contractors and manufacturers' representatives--and possibly, code officials and representatives of SMACNA, AABC, etc. The committee's task would be to explore educational programs and solutions to local problems that are bound to arise. If you are interested, let me know.

CARL H. JORDAN, PRESIDENT

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or Committee Members:  
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**MAIL OR PHONE NEWS TO:**

Nick Dann, Editor  
FOG DISPENSER  
337 Roebling Road  
So. San Francisco, CA 94080  
(415) 873-1660

**MEETING ATTENDANCE**

October 7, 1976

**Members:**

Tom Gilbertson  
Hendrik J. Mouw  
Jack Kniveton  
Gene Valerio  
Carl H. Jordan  
Bob Phillips  
Hank Shastany  
John Werner  
Dick Glumac  
Dave Rifkin  
Sam Yamoto  
Roy Skover  
Lou Pietrelli  
Al Eynon  
Gino Colacchia  
Wayne Jin  
Don Nurisso  
Earl Carrier  
Ray  
Bob Judd  
Rich Wells  
Ed Merino  
Tom Conroy  
Jim Breese  
Bob Swezey  
Dick Friedman  
Lew Pollock  
Robert Voelz  
George N. Aronovsky  
H.S. Huddleston  
Dick H. Fujioka  
Howard Harrey  
G.S. Geongion  
Lin Hsia  
Habib A. Moon  
Ken Lloyd  
Max Wolff  
Fred H. Farmer  
Robert A. D'Elia  
Charles Nadig  
Steve Sprague  
John Brose  
Bill Reeves  
Abraham Bechar  
Jim Nemechek  
Kaz Inouye  
Sherman Brown  
John Kraft  
Dave Attard  
Vic Bach  
O. Stapleton  
D.C. Bryant  
Roy Anderson  
Dick Porter  
Terry Huffman  
Brian Schneider  
Bob Kodak  
Pete Tidmarsh  
Bill Schultz  
Kenneth Hill  
Art Gamble  
Chuck Kope  
Clyde Wilson-Reid  
Tom Namberumal  
Walt Schneider  
Joel Frey  
Dick Charles  
Dauphinee  
Jim Holden  
Gerry Roth  
Chuck Hallock  
Jim Curtin  
Pete Knezevich

L&H Air-Co  
Skidmore, Owings & Merrill  
N.S. Wright & Co.  
Air Filter/Control  
Skidmore, Owings & Merrill  
Kennedy Engineers  
Westates Pacific  
Trane Co.  
Glumac & Webster  
Marina Air Conditioning  
Keller/Gannon  
Lennox  
Hussmann  
G.L. Gendler & Assoc.  
University Mechanical  
Skidmore, Owings & Merrill  
Bechtel  
Consultant  
Ray Burner Co.  
Montgomery & Roberts  
Montgomery & Roberts  
Hess, Greiner & Pollard  
Clyde Equipment Co.  
J.L. Breese  
Air Filter/Control  
Engineered Air  
Trane Co.  
Bentley Engineers  
Aronovsky & Assoc.  
Columbia Mechanical  
Consulting Engineer  
Johns-Manville  
Kopa Engineering Corp.  
Kasin-Guttman Assoc.  
Bentley Engineers  
Lillard Co.  
Dill & Sederberg  
Heat Transfer Equipment Co.  
Robert A. D'Elia, Inc.  
Trane Co.  
Miles Suda & Assoc.  
The Brose Co.  
SOM  
SOM  
AAF  
Kasin, Guttman & Assoc.  
York  
Cornely Co.  
Calif. Hydraulics  
Western Plumbing & Heating  
Wells Fargo Bank  
Univ. of California Ext.  
City College of S.F.  
G.J. Yamas  
Carrier  
Ilg Industries  
Allied Air Products  
York Air Conditioning  
Powers Regulator Co.  
Kaiser Engineers  
Gamble Inst. Sales  
Belilove Co.-Engineers  
Clyde Equipment Co.  
Kasin, Guttman & Assoc.  
Kasin, Guttman & Assoc.  
Norman S. Wright & Co.  
Charles & Braun  
Jenkins Brothers  
Marin Ways, Inc.  
Roth Assoc.  
Alco Controls  
Westronics  
Ind. Power

...continued

**Guests:**

Javed Khan  
Richard Yuen  
Arnold Bletnitsry  
Don Kelley  
Mitch Allert  
Dottie Roark  
Kenny Gerlach  
Russell Will  
Sam Chase

Univ. of California Ext.  
University Mechanical  
Skidmore, Owings & Merrill  
L&H Airco  
Trane Co.  
Kasin, Guttman & Assoc.  
Charles & Braun  
So. City Sheet Metal  
Standard Oil of Calif.

**MINUTES - GENERAL MEETING**

The minutes of the October 7, 1976 general meeting were not received in time for publication in this issue.

Minutes of the October 7 meeting will be published in the December issue.

**ASHRAE GOLDEN GATE CHAPTER**  
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**AUDIT COMMITTEE REPORT**

Fiscal Year 1975 - 1976

The Audit Committee reviewed the books and finds that they are in order as follows:

Annual Income	\$14,722.01
Annual Expenses	12,289.04
Income Less Expenses	\$ 2,432.97

As of June 30, 1976:

Assets	\$ 5,132.97
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Liabilities	\$ 2,700.00
Members' Equity	2,432.97

Liabilities Plus Equity	\$ 5,132.97
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Respectfully submitted,  
DART RINEFORT, Chairman

**\* NOTICE \* NOTICE \* NOTICE \* NOTICE \* NOTICE \***

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MINUTES - GENERAL MEETING, continued

6. Raffle winners:

Hank Moon.....\$ 5.00  
 Roy Gifford.....\$ 5.00  
 Roy Gifford (2nd time)..\$ 5.00  
 Gino Goglaccia.....\$10.00  
 Robert Wistort.....Free dinner

7. Gene Valerio announced programs for next few months and introduced the speaker, James Reese of Tempmaster, Program Speaker, on the subject of the "Variable Air Volume Systems (VAV)."

8. Technical program - VAV systems by Jim Reese:

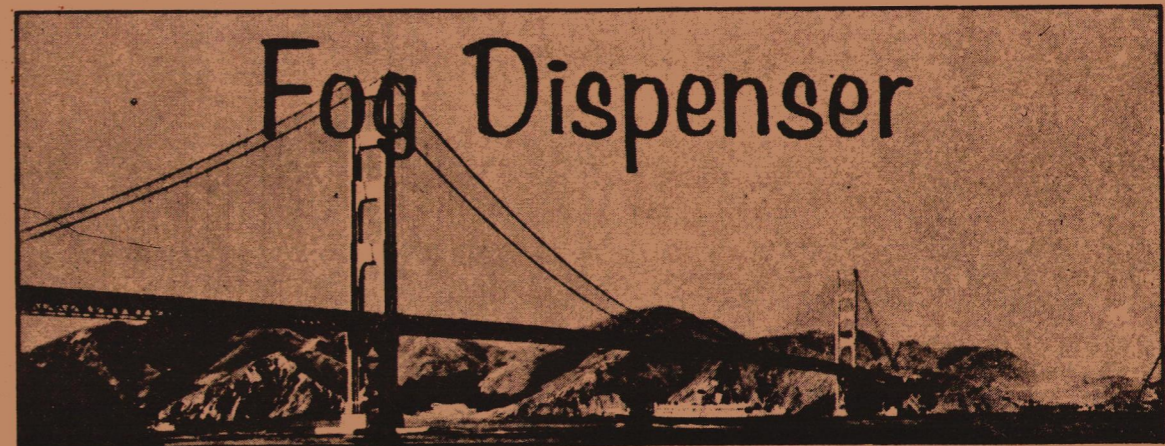
- a) Energy aspects of the VAV system - explained why it is the most economical system from the operating standpoint, particularly in scaling down the future excess capacity to present needs.
- b) Explained design selection and application of slot diffusers.
- c) Discussed the sound problems related to the VAV systems.
- d) Presented several cases of past projects with the operating and first-cost figures.
- e) Pointed out several do's-and-don'ts of the VAV system design.
- f) Discussed the use of the computer programs for the design of VAV systems and duct sizing.

Respectfully submitted,  
 D.M. GLUMAC, SECRETARY

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HAVE A HAPPY NEW YEAR!

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GOLDEN GATE CHAPTER



ASHRAE

VOLUME XVI NO. 3

DECEMBER 1976

MEETING ANNOUNCEMENT

The third meeting of the Golden Gate Chapter for the 1976-77 year will be held at the Engineers' Club on the 16th Floor of the Hong Kong Bank Building, 160 Sansome Street, San Francisco on Thursday, December 2, 1976. The Social Hour will begin at 5:30 PM, with dinner at 6:45 PM.

DECEMBER PROGRAM

Gene Valerio, Chairman

SUBJECT: ARCHITECTURAL FLEXIBILITY WITHIN TITLE 24 ENERGY REGULATIONS

SPEAKER: Dennis Bridges, Manager of Market Development, The Trane Company, Wisconsin

Mr. Bridges will compare the energy consumption of a typical San Francisco building designed prior to Title 24 and one designed following the regulation. The architectural flexibility allowed by the Code in Division 2 (computer simulation, for example, the TRACE Program) will be illustrated. Mr. Bridges is a dynamic speaker well-versed in this subject. His presentation will be of particular interest to architects, and engineers should bring their clients as guests!

PRE-MEETING WORKSHOP

Bill Reeves, Chairman 6:00-6:45 PM  
 Upstairs

SUBJECT: IMPORTANCE OF FAN BALANCING

Mr. Tom Gilbertson, L&H Air-Co, will discuss Rathbone balancing curves, how they are effected at the factory and checked in the field, writing specifications to minimize problems, and unusual experiences in the field.

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MINUTES - GENERAL MEETING NOVEMBER 4, 1976

1. Mr. Jordan opened the meeting with the introduction of students and new members.
2. Mr. Jordan asked members to send in dinner reservations.
3. Pete Filios made announcement for 27th May or 4th June, proposed joint golf-tennis tournament at Pleasanton.
4. Mr. R. Kief thanked the Chapter for Cal Poly Workshop.
5. Mr. R. Perry, the Regional Director made the following brief remarks:
  - a) Metric system
  - b) Attendance at the annual meeting at Seattle
  - c) Committee chairman participation at CRC meetings
  - d) Invited all to attend the CRC meeting at Vancouver, B.C. in May 1977

...continued Page 4

HONOR ROLL

EDWARD B. WARD & COMPANY

Carrier Air Conditioning Distributor

Air Conditioning/Refrigeration  
 Parts and Supplies

Published monthly 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 94105, 495-4550.

1976 - 1977

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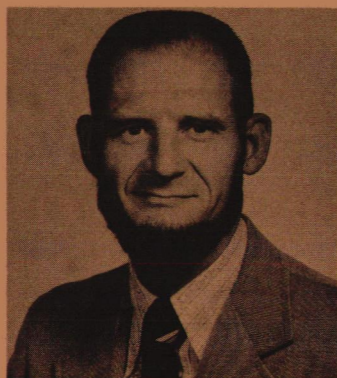
**BOARD OF GOVERNORS**

James M. Holden  
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Jack A. Palmer



PRESIDENT'S

**CORNER**



CARL H. JORDAN

Dear Members:

We had a superb turnout of new members and students at our November meetings. While the Cal Poly students were here, they were exposed to several engineering offices and projects. It was my pleasure to host them in our office and at a nearby construction project. The interest and inquisitiveness of these young engineers is both refreshing and overwhelming. It's nice to see that our replacements are being properly groomed for their future roles.

Our new name badges are now in the production process. If you are a new member, you should soon have a name badge. If it doesn't materialize, contact Bill Schultz, our Attendance and Reception Chairman, at the meeting reception desk.

The Roster is in its final stages of development. You should receive a copy before Christmas.

The October Fog Dispenser, mailed "bulk rate," was received too late by many of you. The November issue, mailed First Class, was delivered on time. Tom Gilbertson is now coordinating our activities to get it to you on time at the least possible cost.

Our meeting programs have been good, and Gene Valerio has lined up some great ones for future meetings. And, we're serious (aren't we, Gene?) about the Reno trip for members and their spouses. Talk it up at home so we can have a good turnout.

CARL H. JORDAN, PRESIDENT

**COPY DEADLINE**

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Meeting Date	Copy Deadline
2 DEC 1976	15 NOV 1976
6 JAN 1977	20 DEC 1976
3 FEB 1977	17 JAN 1977
3 MAR 1977	14 FEB 1977
7 APR 1977	21 MAY 1977
7 MAY 1977	18 APR 1977
2 JUN 1977	16 MAY 1977

**KNOW A PROSPECTIVE NEW MEMBER?**

Contact Membership Chairman:  
Jim Nemechek . . . . . 415/648-0646

or Committee Members:  
Chuck McLaughlin . . . . . 415/326-9115  
Bob Phillips . . . . . 415/362-6065

**MAIL OR PHONE NEWS TO:**

Nick Dann, Editor  
FOG DISPENSER  
337 Roebling Road  
So. San Francisco, CA 94080  
(415) 873-1660

MEETING ATTENDANCE

November 4, 1976

Members:

Strickland  
Tom Spahr  
Ash Agbostivala  
Chuck Kopf  
F.M. Palacios  
Charles Nadig  
Carl Landers  
Hendrik J. Movv  
Ken Lloyd  
Ralph E. Williams  
M.H. Linsley, Jr.  
Jim Breese  
Glenn Driver  
Jerry Huffmann  
Brian Schneider  
Jim Curtin  
Bob Roach  
H.S. Huddleston  
Marinko Kraljevich  
Bill Schultz  
Kazuo Inouye  
Sam Yamavchi  
Habib A. Moon  
Abe L. Mendoza  
Kevin Dowling  
Raj Jandu  
Frank Gonden  
Tom Namberumal  
Kenneth C. Hill  
Art Gamble  
George M. Lim  
Dart Rinefort  
Wei Lin Hsia  
Roy S. Anderson  
Gino Colacchia  
Tom Pumphry  
Gendler  
Don Bradshaw  
S. Hoogs  
H. Burney  
Sam Chase  
I.H. Ali  
Bob Wistroy  
Walt Schneider  
Ted Georgiou  
Gary Jew  
S. John  
Henry Dong  
Ed Merino  
Al Eynon  
Dick Porter  
Steve Sprague  
Mike Rubio  
Keith Lescure  
Sherman Brown  
Gerry de Reus  
Lu Bedard  
Robert Voelz  
Jona White  
O. Stapleton  
Vic Baeh  
Jim Lynn  
Pete Tidmarsh  
Bud Dauphinee  
Gene McCabe  
Roy Gufford  
Gregory Braak  
R.D. Caughron  
D. Robinson  
Earl Carrier  
Tom Gilbertson  
Bob Phillips  
Ed Keif  
Carl H. Jordan  
Jim Reese  
John Werner  
Richard Schennert

Safeway Stores Inc.  
Safeway Stores Inc.  
-  
Bellilove Co.  
U.S. PS.  
Trane Company  
Trane Company  
Skidmore, Owings & Merrill  
Lillard Co.  
Lambert Industries  
Keller & Gannon  
J.L. Breese  
Carrier Air Conditioning  
Carrier Air Conditioning  
ILG Industries  
Fairchild Semiconductor  
Hess, Greiner & Polland  
Columbia Mechanical Inc.  
Bank Building  
Powers Regulator Co.  
Kasin, Guttman & Assoc.  
JYA Consulting Engineers  
Bentley Engineers  
Skidmore, Owings & Merrill  
Brentley Engineers  
Ayres & Hyakawa  
Bentley Engineers  
Kasin, Guttman & Assoc.  
Kaiser Engineers  
Gamble Inst. Sales  
Glumac & Webster  
Glumac & Webster  
Kasin, Guttman & Assoc.  
City College of S.F.  
University Mechanical  
University Mechanical  
G.L. Gendler & Assoc.  
Owens Corning Fiberglas  
Owens Corning Fiberglas  
Baunacaursi Associates  
Standard Oil of Calif.  
Ali & Associates  
Pribuss Engineering Inc.  
Kasin, Guttman & Assoc.  
Kopa Engineering  
City College of S.F.  
City College of S.F.  
City College of S.F.  
Hess, Greiner & Polland  
G.L. Gendler & Assoc.  
G.J. Yamas Co. Inc.  
Miles Suda & Assoc.  
G.J. Yamas Co. Inc.  
A.R. Peterson & Sons  
York  
Mech. Maint. & Service  
Dinwiddie Construction  
Bentley Engineers  
-  
Wells Fargo Bank  
Western Plmbg & Htg Co.  
Scott Co.  
York  
Jenkins Bros.  
Western Plmbg & Htg Co.  
Vann Engineering  
Johnson Controls  
Caughron Inc.  
Bechtel Inc.  
Consultant  
L&H Air-Co  
Kennedy Engineers  
Cal Poly  
Skidmore, Owings & Merrill  
Temp Ind. - KC  
Trane Co.  
Bechtel Inc.

...continued

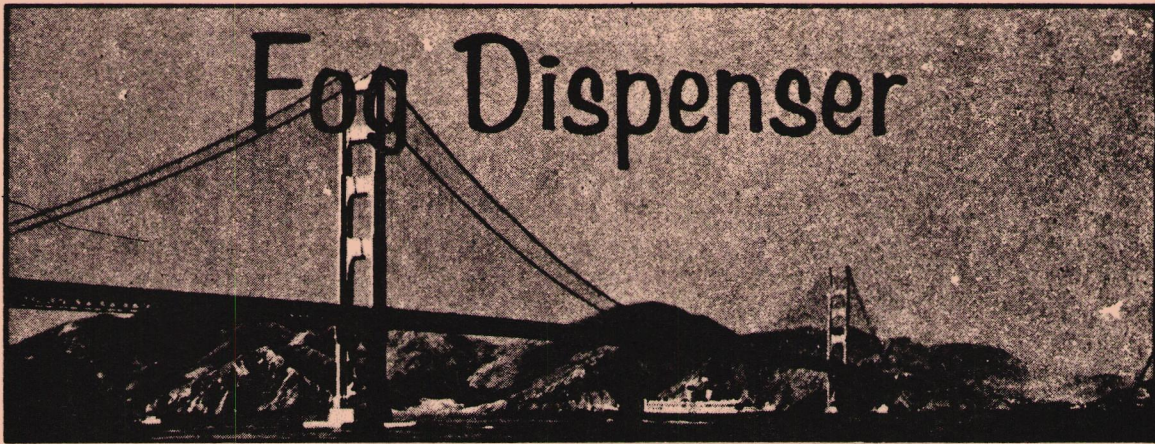
Gene Valerio  
Dan Bryant  
Jack A. Palmer  
Dick M. Glumac  
Dan Vandarent  
Pete Filios  
Dick Fusioka  
Jim Nemeche  
Max Wolff  
Chuck McLaughlin  
Howard Friesen  
Herb Duncan  
Jack Kniveton  
Bob Judd  
Clyde Wilson Reid

Air Filter/Control  
Univ. of California  
California Hydronics Corp.  
Glumac & Webster  
Disneyland  
Flame Air Inc.  
Consulting Engineer  
AAF  
Dill & Sederberg  
McLaughlin Assoc.  
G.J. Yamas Co.  
Flame Air Inc.  
Norman S. Wright Co.  
Montgomery & Roberts  
Clyde Equipment Co.

Guests:

Abraham Bechar  
C.J. Rosenberg  
Harry Ajmani  
Dennis Paoletti  
Joel Lewitz  
Ken Solberg  
C.M. Hsiung  
Dottie Roark  
R. Goodwin  
Tom Molinaro  
Werner E. Roster  
R.J. Krauthamer  
Gene Bettencourt  
Jay Rubins  
Hank Shastany  
Mitch Allert  
Darrell Lackey  
Kenneth Reed  
Shing J. Lo  
Steve Williams  
Bruce Johnson  
Steve Poe  
Dale White  
Tom Tamadon-Nejad  
Ron Leach  
Mike Murphy  
Mat Waller  
Lance Caples  
Murray Jansen  
Shawn Lyons  
Scott Farthing  
Dennis Hammond  
John Allen  
Art Williams  
Sam Garkovich  
Arnold Bletnotsry  
M. Komadina  
Richard Leao  
G. Perry  
Adele White  
Joe Bibat  
Jim Heuwarta  
Dennis Gruszynski  
Mike Anissimov  
Bruce Baker  
Bill Randolph  
Jerry Nolan

SOM  
C.J. Rosenberg Engineering  
Skidmore, Owings & Merrill  
Paoletti/Lewitz/Assoc.  
Paoletti/Lewitz/Assoc.  
York  
Robert B. Liles, Inc.  
Kasin, Gottman & Assoc.  
Bechtel Inc.  
Carrier Air Conditioning  
Carrier Int. Corp.  
ILG Industries  
Carrier Air Conditioning  
Westates Pacific  
-  
Trane Company  
JYA Consulting Engineers  
JYA Consulting Engineers  
Facil, Manage, UCSF  
Cal Poly - AC Club  
Cal Poly - AC Club  
Cal Poly - AC & R  
Cal Poly - Student Chapter  
Cal Poly - AC & R  
Cal Poly - AP & WP  
Cal Poly - AC & R  
Cal Poly - AC & R, AP, WP  
Cal Poly - AC & R  
Cal Poly - AC & R, AP, WP  
Cal Poly - AC & R  
Cal Poly - ET, AC & R  
Cal Poly - ET, AC & R  
Cal Poly  
Cal Poly - AC & R  
Cal Poly - AC & R  
SOM  
A.R. Peterson & Sons  
Norman S. Wright & Co.  
Perry Engineering  
-  
L&H Air-Co  
L&H Air-Co  
Johnson Controls  
Cal Poly, SLO  
Cal Poly, SLO  
Bechtel Inc.  
L&H Air-Co



**GOLDEN GATE CHAPTER**



**ASHRAE**

VOLUME XV NO. 9

JUNE 1976

MEETING ANNOUNCEMENT

The next meeting of the Golden Gate Chapter will be held at the Engineers' Club in the Hong Kong Bank Building, 160 Sansome Street, San Francisco on Thursday night, June 3, 1976. The social hour will begin at 5:30, with dinner at 6:45 PM.

JUNE PROGRAM

Carl Jordan, Chairman

Past Presidents' Night: As many of our past Presidents as possible will be in attendance to share with us the "good ol' days", the present and their views of the future in areas of their particular interest, including ASHRAE, business conditions, changing design concepts, new codes, etc.

This promises to be a fun evening with our esteemed past Presidents.

**NOTICE \* NOTICE \* NOTICE \* NOTICE \* NOTICE**  
THERE WILL BE A RAFFLE OF THE RETURNED RESERVATION CARDS! AND THE ONE PICKED WILL RECEIVE A FREE DINNER FOR THAT NIGHT'S MEETING. SEND IN YOUR RESERVATION CARD EARLY!

ASHRAE RESEARCH FUND

For more than 56 years, ASHRAE has conducted a program of basic and applied research for the benefit of industry and the general public.

.....continued next column

continued.....

ASHRAE invites all industries to assist in its research activities by investing in them yearly and utilizing the expertise available in the Society through its Research Program.

The results of ASHRAE research, from the theoretical to the practical, are revealed in its standards, and in the products in the market place.

Funding for ASHRAE research is largely from contributions from industries, chapters, and individuals.

You may notice the list of large contributors published yearly in the Journal. This is not to imply that only large contributions are sought - every bit helps. Your individual contribution - be it \$10 or \$25 or whatever - will help too, and is greatly appreciated.

Take pride in your Society - the one Society that, through its research and publications, does so much more. Consider a small (or large) contribution today. Use the form sent to you, or contact the Chapter for one. Thank you.

-----  
Members who have contributed to ASHRAE Research since December 31, 1975:

Tom White

HONOR ROLL

INDUSTRIAL STEAM, INC.  
Mr. M. Bekedam

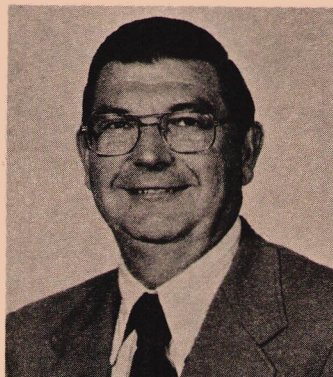
P.O. Box 10266  
Oakland, CA 94610

Telephone:  
261-8737



PRESIDENT'S

CORNER



JACK A. PALMER

Published monthly 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 94105, 495-4550.

**OFFICERS AND BOARD OF GOVERNORS**  
1975 - 1976

- Jack A. Palmer. . . . . President
- Carl H. Jordan. . . . . Vice-President
- Eugene L. Valerio. . . . . Secretary
- Dick M. Glumac. . . . . Treasurer

**BOARD OF GOVERNORS**

- Richard A. Charles
- Thomas A. Gilbertson
- James M. Holden

**COPY DEADLINE**

In order to meet our publication dates, we have established the following as the last possible dates that copy for the *Fog Dispenser* can be in the editor's hands.

<u>Meeting Date</u>	<u>Copy Deadline</u>
---------------------	----------------------

3 June 1976

**KNOW A PROSPECTIVE NEW MEMBER?**

Contact Membership Chairman:  
Chuck McLaughlin . . . . (415) 326-9115

or Committee Members

Dart Rinefort . . . . . (415) 398-7667

Pete Tidmarsh . . . . . (415) 376-0424

MAIL OR PHONE NEWS TO:

Nick Dann, Editor  
FOG DISPENSER  
337 Roebing Road  
So. San Francisco, CA 94080  
(415) 873-1660

Dear Members:

This is the last Fog Dispenser to be published for this fiscal year, and as your President, I would like to take this opportunity to thank everyone who has helped make this year a success. It has been a wonderful experience.

As in all organizations, there are the participants and the observers - and we are no exception! The participants are the ones who made the chapter successful; I urge all of you who have never volunteered to try it and you will find yourself getting more out of ASHRAE than the publications.

Due to a slip-up, the request for funds for ASHRAE Research was not included in the previous Fog Dispenser. By now you should have received the notice, so please contribute any amount for your Society.

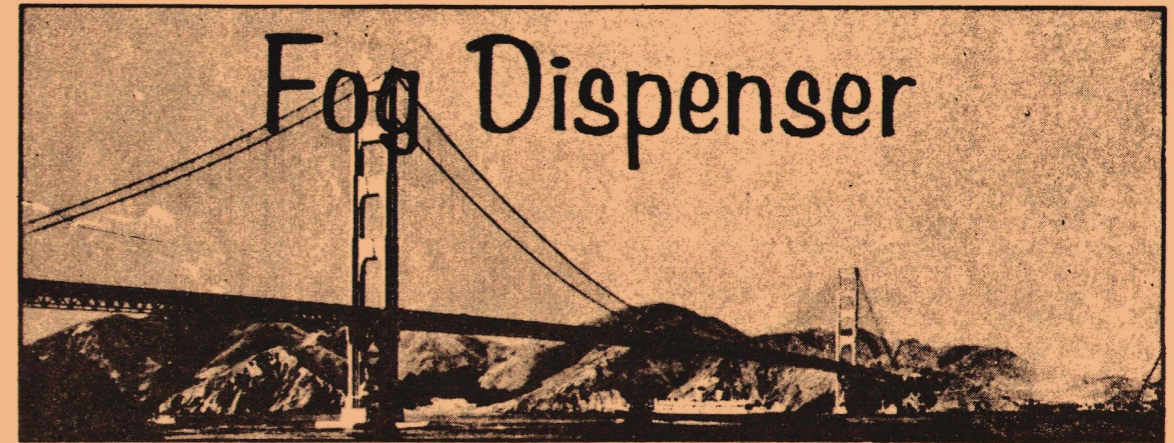
TREASURERS REPORT

<u>FOR MONTH ENDING</u>	<u>TOTAL ASSETS</u>	<u>TOTAL LIABILITIES</u>	<u>MEMBERS' EQUITY</u>	<u>TOTAL LIABILITIES AND EQUITY</u>
March 1976 (Rev)	\$11047.84	\$9900.00	\$1147.84	\$11047.84

Respectfully submitted,

Dick Glumac

Treasurer



GOLDEN GATE CHAPTER



ASHRAE

VOLUME XV NO.4

JANUARY 1976

FOG DISPENSER

PAGE 4

JANUARY 1976

MEETING ANNOUNCEMENT

The fourth meeting of the Golden Gate Chapter for the 1975-76 year will be held at the Engineers Club in the Hong Kong Bank Building, 160 Sansome Street, San Francisco, on Thursday night - January 8, 1976. The social hour will begin at 5:30 PM with dinner at 6:45 PM.

- Return fan control
- Minimum outside air control
- Unstable fan operating protection
- Warm-up cycle heating energy control

DECEMBER PROGRAM

Carl Jordan, Chairman

SUBJECT: HVAC PROBLEMS - INNOVATIVE SOLUTIONS AND NOT-SO INNOVATIVE MISTAKES

A short presentation by each Chapter Officer and Board Member, each of whom will discuss an interesting problem and its innovative solution; and a situation where he was involved in a mistake. Because of the make-up of the Officers and Board Members, the items discussed will necessarily include design, construction and materials supplying.

SAN JOSE CHAPTER HOSTS SEMINAR

A reminder, that San Jose Chapter 101 will hold it's Annual Maintenance Seminar on January 20 and 21, 1976.

The two evening seminar will be held at the Le Baron Hotel, 1350 North First Street, San Jose, between 7 P.M. and 10 P.M. each day.

All members of the Golden Gate Chapter are cordially welcome to attend.

Details may be obtained by calling John Petrianos at (408) 257-5212.

DECEMBER WORKSHOP

Roy Anderson, Chairman 6:00-6:45 PM  
Upstairs

"AIR FLOW MEASUREMENT & VOLUME RELATED CONTROL"

Our speaker, Mr. Robert Noll, developed the "Air Sentinel" air flow measuring products for the CAMBRIDGE FILTER CORPORATION. He will discuss the products' application in solving VAV system problems such as:

- Supply fan control

HELP WANTED

All Energy Committee Members and other volunteers are needed to staff the registration desks, distribute manuals and to serve as information officers at the one day seminar on ASHRAE Standard 90-75 and Title 24, on February 25, 1976.

Please call Dick Glumac at 398-7667 or volunteer at the January 8, 1976 general meeting.

RETIREE MEMBERSHIP

Headquarters has again received many inquiries regarding retiree membership.

Members of the Society who have retired from active business, have completed fifteen years of membership in the Society, and are sixty years of age or over can continue their Society membership grade at reduced annual dues of \$10, but they must request this change themselves.

Such retirees will retain all the privileges of their current member grade, and will receive all publications regularly sent to members of that grade except the ASHRAE Handbook & Product Directory. Retiree membership, however, will not be credited toward the service requirements for Life Membership.

ADDRESS CHANGES

Recently, we published instructions and a procedure to notify us of your change of address. We told you to send a notice to Secretarial Service, 1255 Post Street, San Francisco 94109, and to identify yourself as an ASHRAE member. THIS WILL CHANGE YOUR ADDRESS ON OUR LOCAL MAILING LIST ONLY.

To change the mailing address for the ASHRAE Journal, ASHRAE Guide, etc. YOU MUST ALSO NOTIFY INTERNATIONAL HEADQUARTERS. Send change of address notice to: ASHRAE Membership, 345 East 47th Street, New York, N.Y. 10017, and be sure to give them your member number. If your title and/or company have changed, advise them of this also.

**Southwest  
Air-Conditioning  
Heating  
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**Convention Center, Dallas, Texas**

**February 2-4, 1976**

Co-sponsored by ASHRAE & ARI.  
Management: International Exposition Co.  
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CORNER

PRESIDENT'S



JACK A. PALMER

Published monthly by the Golden Gate Chapter of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, c/o Grace Hackett & Assoc., Jack Tar Hotel, 1255 Post Street, San Francisco, California - 673-3850

OFFICERS AND BOARD OF GOVERNORS

1975 - 1976

Jack A. Palmer President  
 Carl H. Jordan Vice President  
 Eugene L. Valerio Secretary  
 Dick M. Glumac Treasurer

BOARD OF GOVERNORS

Thomas A. Gilbertson  
 James M. Holden  
 Richard A. Charles

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5 Feb. 1976	21 Jan. 1976
4 Mar. 1976	18 Feb. 1976
1 Apr. 1976	17 Mar. 1976
6 May 1976	21 Apr. 1976
3 June 1976	19 May 1976

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Contact Membership Chairman:  
 Chuck Mc Laughlin - (415) 326-9115  
 Or Committee Members:  
 Dart Rinefort - (415) 686-6717  
 Pete Tidmarsh - (415) 376-0424

MAIL OR PHONE NEWS TO:

Nick Dann, Editor  
 FOG DISPENSER  
 337 Roebbling Road  
 So. San Francisco, Ca 94080  
 (415)-873-1660

Dear Members:

Our December program was excellent! Mr. Jack Wilson spoke on the "Conversion to the Metric System". I am only sorry that more members were not able to attend.

We received a thank you from Robert E. Kennedy, President of Cal Poly, for the Chapters donation of \$1,000 to the Cal Poly Workshop.

Next year will be the "Year of the Seminar". We have been selected to host the ASHRAE 90-75 Standard Seminar for Northern California to be held on Wednesday, February 25, 1976 at the Hyatt Hotel - Union Square. Our moderators will be Bob Voelz and Don Bryant from the Golden Gate Chapter, and Bob Roberson from the Southern California Chapter. The fee will be \$35.00 for ASHRAE members and \$70.00 for non-members. This will be an all day affair from 8 A.M. to 5 P.M. Our moderators will also point out the differences between the 90-75 Standard and California Title 24. Be sure to keep this date open and pass this information on to all interested parties. Mailings for pre-registration will be forthcoming.

The Golden Gate's "Technical Seminar" will be titled "Heating and Air Conditioning - 1976 Update / Energy - Seismic - Life Safety - Does your Facility Conform"? The dates will be April 20th, 27th, May 4th and 11th. Please keep these dates open. Your Board and Seminar Committees have been working very hard to prepare these seminars for our industry.

I have a question for you members for which I would appreciate an answer....why don't you attend our meetings? Is it money, time, or effort? Please let us know to enable us to better the Chapter.

Jack Palmer

MINUTES - GENERAL MEETING DECEMBER 4, 1975

The meeting was called to order by President Palmer at 7:30 P.M., followed by self-introductions of members and guests.

The minutes of the November meeting were approved with corrections;  
 a. Tom White, not Tim  
 b. Meeting date was 12/4/75, not 12/5/75

President Palmer announced the 90-75/Title 24 Seminar in San Francisco on February 25, 1976.

Carl Jordan announced future programs: Solar Energy, Nuclear Initiative, Mail Facility Tour, Social. January 8 meeting: Board members each to present a brief summary of their greatest triumph and greatest disaster.

Jordan introduced the program speaker for the evening, Jack L. Wilson, Supervisor of Standards and Calibration at Sandia Laboratories, and Chairman of the California Metric Committee; topic: Metrication (Conversion to the Metric System). A summary of his remarks follows:

- Metric is not new to the USA; proposed in 1792, legalized in 1866; treaty signed in 1874. The international system of SI units adopted in 1960: today the USA stands practically alone in not adopting them.
- All SI is metric; all metric is not SI. SI consists of seven base units and two supplementary units: metric, kilogram, second, Kelvin, newtons, pascal, joule watt, celsius. Standard prefixes denote the multiplier on the basic unit of one. Large numbers are written without a comma, but are separated in groups of three with a space.
- "Soft" metrication: English units converted directly to SI; used during interim changeover period. "Hard" metrication: rounded-off SI units are used, and size is changed.
- Advantage: In the bottling industry, SI wine bottles now in seven sizes instead of sixteen standard and seven special sizes. Liquor industry also following suit. One soft drink now available in the Bay Area in liter and half-liter sizes.
- Dual dimensioning is a crutch and hasn't been advantageous in other countries. Abrupt change is better.
- US export trade is suffering because products are not defined in SI. By January 1, 1978, they must be. National legislation is expected by January 1, 1976 to implement SI on a voluntary basis.
- Major problem is education, a part of the function of the California Metric Commission. The California Department of Education will buy text books with SI instruction material.
- Auto and pharmaceutical industries have used metric for a long time. The new single metric thread will afford large savings: twenty-five sizes vs. one hundred and seventeen.

After a good audience participation period, Palmer adjourned the meeting.

Respectfully submitted,  
 Eugene L. Valerio  
 Secretary

COMMITTEE REPORTS WANTED

Your FOG DISPENSER is the vehicle by which all Golden Gate Chapter members can be kept abreast of the Chapter's activities.

Being a member of ASHRAE is much more than monthly meetings or receiving the ASHRAE Journal. Being a member is to get involved - to work on a Chapter committee - to contribute ones own knowledge for the betterment of our industry - to be an active participant in our ASHRAE fraternity (ladies welcome...of course!).

Regrettably, many members, particularly newer members, would like to get involved, but really don't know how. At the same time, committee chairmen tend to get discouraged because no one ever speaks up to volunteer their time or experience.

OK, Chairmen! Here's your chance! Send summaries of your committee's activities to the FOG DISPENSER for publication. Perhaps...just perhaps.... this will hit a members hot button, and encourage him to get involved. At the same time, your FOG DISPENSER will become a better "sounding board", of interest to all members.

ASHRAE ATTENDANCE 12/4/75

MEMBERS

- |                  |                             |
|------------------|-----------------------------|
| Dale Missimer    | Polycold Systems, Inc.      |
| John Hogan       | Sporlan Valve Co.           |
| Fred Farmer      | Heat Transfer Eq. Co.       |
| Dick Frenzel     | E.B. Ward & Co.             |
| Dick Glumac      | Glumac & Webster            |
| Gene Valerio     | Air Filter Control          |
| Carl H. Jordan   | Skidmore, Owings & Merrill  |
| Jack A. Palmer   | Calif. Hydronics Corp.      |
| Tom Gilbertson   | L & H Air Co.               |
| John H. Gesser   | L & H Air Co.               |
| Arlen Allinger   | G.T. Kuntz & Co.            |
| Ihsan Ali        | I.H.AH & Associates         |
| Art Gamble       | Gamble Inst. Sales          |
| Bus Pumphrey     | University Mechanical       |
| Gerardic Rens    | Mech. Maint. & Serv. Corp.  |
| Bernie Beckius   | Scott Co. of Calif.         |
| Allen Wicks      | SMACNA                      |
| Bert Coddington  | Health Education & Welfare  |
| Bud Ferry        | Bouey & Co.                 |
| Kaz Inouye       | Kasin, Guttman & Associates |
| Dick Porter      | G.J. Tamps Co. Inc.         |
| Tom Namberumal   | K. Guttman & Associates     |
| Bob Swezey       | Air Filter Control          |
| Jim Breese       | J.L. Breese                 |
| Al Eynon         | G.L. Gendler & Assoc.       |
| Howard Friesen   | G.J. Yamas Co. Inc.         |
| Keith Lescurc    | A.R. Peterson & Sons        |
| Chuck McLaughlin | McLaughlin Associates       |
| Jerry Hill       | Western Air                 |
| Max Wolff        | Vandament Engineers         |
| Dan Vandament    | Vandament Engineers         |
| Clyde Wilson     | AM Clyde Equipment          |
| Duane Hanson     | Gaynor Engineers            |
| Tom White        | American Standard Inc.      |
| Jim Nemechek     | American Air Filter         |
| Tom Collins      | F. Thomas Collings          |
| Roy Anderson     | City College of San Fran.   |
| Don Bryant       | U.C. Extension Berkeley     |
| Dave Attard      | Calif. Hydronics            |
| Pete Knezevich   | Industrial Power Inc.       |
| Roy Graves       | Mc Clenahan Co.             |
| Bill Schultz     | Powers Regulator Co.        |
| Hank Huddleston  | Columbia Mechanical Cont.   |
| George Aronovsky | Aronovsky & Associates      |
| Arel Berrier     | California Hydronics        |
| Jim Curtin       | Fluor Utah                  |
| Grant Bentley    | Bentley Engineers           |

GUESTS

- |                |                      |
|----------------|----------------------|
| Jack L. Wilson | Sandia Labs.         |
| James L. Page  |                      |
| Fred Feuille   | Betz Entec           |
| Doca Daniels   | Berkeley Solar Group |



photo by John Hogan

JACK L. WILSON - Speaker at the December 4, 1975 meeting of the Golden Gate Chapter, ASHRAE, presented a program on the impending conversion to the metric system.

EVENING COURSE IN REFRIGERATING CONCEPTS AT UC EXTENSION

Continuing Education in Engineering, University of California Extension, will offer an evening course in Refrigerating Concepts, Spring Session 1976.

Intended to assist practicing engineers and designers, the course covers theory, application, and equipment of basic refrigerating cycles. Major emphasis is on the vapor-compression refrigerating cycle and includes system components, capacities, selection and sizing of equipment. Cooling loads, controls, refrigerants, pipe sizes, and energy requirements are also included.

REFRIGERATING CONCEPTS X471. (2 Units). Monday Evenings, 7-9:30 PM; February 23 - April 26, 1976 (Holidays - March 29 and April 12); 8 Sessions; \$60.

Prerequisite: Working knowledge of physics or consent of instructor.

The First meeting will be Monday, February 23, 1976, 7 PM, University of California Extension Center, 55 Laguna Street, San Francisco.

Text: "Principles of Refrigeration" - Roy J. Dossat; John Wiley & Sons, Inc., 1961.

Donald C. Bryant, Sr., M.S., Emeritus Faculty, Engineering Department, City College of San Francisco.

This is the third in a series of courses in Air Conditioning, Heating and Refrigeration. Courses that are being considered for future presentation include: Air Conditioning Systems-- Analysis and Design; Energy Related to Air Conditioning, Refrigerating and Heating Systems; and Control Systems and Control Elements Applied to Air Conditioning, Refrigerating, and Heating Systems.

For further information about this course, please contact either Donald C. Bryant (584-0765), or University of California Extension, Berkeley (642-4151).

You may enroll either by mail or in person. To request a brochure and application forms, call the University Extension Fee and Information Office, 55 Laguna Street, San Francisco (861-6833).

SAN FRANCISCO 90/75 - TITLE 24 ENERGY SEMINAR

The Golden Gate Chapter of ASHRAE will host a one day seminar on Energy Regulations for New Construction, to include both the ASHRAE Standard for Energy Conservation and the State of California Regulations for Energy Conservation.

The Seminar will take place at the Hyatt Union Square on February 25th, 1976. The fee is modest: \$35.00 for ASHRAE members and \$70.00 for non-members.

The Seminar will be conducted by specially-trained instructors using a slide presentation, and by reference to instruction manuals. The manuals will contain ASHRAE Standard 90/75, latest draft of State of California Title 24 Energy Regulations, and 50 pages of instructions and explanations.

For information call:

- Jack A. Palmer (415)341-6100
- Carl H. Jordan (415)981-1555
- Dick M. Glumac (415)398-7667

HOW TO KILL YOUR CHAPTER

1. Stay away from meetings.
2. If you do come, find fault.
3. Decline office or appointment to a committee.
4. Get sore if you aren't nominated or appointed.
5. After you are named, don't attend board or committee meetings.
6. If you do get to one, despite your better judgement, clam up until it's over. Then sound off on how things should be done.
7. Do not work if you can help it. When the Old Reliables pitch in, accuse them of being a clique.
8. Oppose all banquets, parties, and shindigs as being a waste of the members' money.
9. Never accept a place at the head table.
10. If you aren't asked to sit there, threaten to resign because you are not appreciated.
11. Don't rush to pay your dues. Let the directors sweat; after all, they wrote the budget.

MEETING ATTENDANCE...continued

Guests

- |                |                              |
|----------------|------------------------------|
| Bill Schultz   | Powers Regulator Co.         |
| Richard Leao   | Norman S. Wright & Co.       |
| John Lewis     | Skidmore Owings & Merrill    |
| Richard Almini | Powers Regulator Company     |
| M. Rubio       | G.J. Yamas                   |
| A. Bletnitsky  | SOM                          |
| Don Nurisso    | Bechtel                      |
| Hal Wong       | Bechtel                      |
| Dale Sartor    | Injeractive Resources        |
| Paul Pribuss   | Pribuss Engineers Inc.       |
| Wayne Jon      | Skidmore, Owings, & Merrill  |
| Tom Fewell     | Engineered Air Systems, Inc. |
| Richard S. Oas | Safeway Stores Inc.          |

OAKLAND PORT CHIEF ENGINEER BERTKEN NAMED CHAIRMAN OF 1976 BAY AREA ENGINEERS' WEEK

Thomas G. Bertken, Chief Engineer, Port of Oakland, has been appointed General Chairman of the 1976 Bay Area Engineers' Week scheduled for February 22 - 28, according to the San Francisco Bay Area Engineering Council, sponsor of the event which this year will salute "American Ingenuity-200 Years of Engineering."

Bertken, a resident of San Francisco, has headed engineering planning, and construction activities for Oakland's marine terminal and airport since January, 1975. He formally was Deputy Director of Airports, Planning, and Development for the San Francisco Airports Commission.

"Engineers' Week this year," said Bertken, "will spotlight some of the remarkable advances in the lifetime of our Nation to which engineering and technology have contributed directly. Commemorative observances locally will include a schedule of special events for students and the general public, dedication of engineering historical sites, \$8,600 in college scholarships and other awards, a career guidance program for high school students, a career management workshop for professionals, and a gala Engineers' Week Banquet Thursday night, February 26, at "Bimbo's".

The banquet, said Bertken, will feature a nationally known speaker yet to be announced. Orders for tickets should be sent to banquet chairman Lorne E. Swanson, C.S.O. International, Inc., 2450 Stanwell Drive, Concord, CA 94520. "I urge everyone to whom the profession of engineering is important," Bertken declared, "to plan now to attend this colorful event."

Free Engineers' Week posters and envelope stickers, he said, are available from public relations chairman Walter Brown, Consulting Engineers Association of California, 1308 Bayshore Highway, Burlingame.

SPECIAL NOTE

The minutes of the October meeting were an accurate record of a portion of the remarks made by Mr. Leo Dwyer of Ralston and Dwyer, San Francisco. In the interest of brevity, however, the Chapter Secretary did not color them with the levity so well expressed by Mr. Dwyer, and so his statements might be mis-interpreted by our more sensitive readers who did not hear the actual presentation. Mr. Dwyer has generously offered to furnish a verbatim copy of his remarks to interested parties upon request. In addition, a verbatim copy of his talk will be inserted in the official records of the Chapter for future reference as the occasion demands.

CCSF OFFERS ASHRAE SPONSORED COURSE IN AIR CONDITIONING

The City College of San Francisco is offering an Evening Division course in Air Conditioning. This course, one of a series of Air Conditioning Courses offered by CCSF and sponsored by the Golden Gate Chapter of ASHRAE, will include:

- \*Air Distribution and Diffuser Selection
- \*Basic Duct Layout and Design
- \*Fan Analysis and Performance
- \*Water Piping Design
- \*Refrigerant Piping Design
- \*Basic System Analysis and Selection

Registration will be on January 29th and 30th from 4:00 to 7:00 PM, and January 31st, 10:00 to 12:00 noon, at the CCSF Student Union, Lower Level.

Tuition is free to California residents. Textbooks must be purchased by the student. First class will be held on Saturday, February 7th (9:00 AM to 1:00 PM), and consecutive Saturdays through June 12th, except holidays. The instructor will be Dart Rinefort.

For details, call 587-7272. If interested in other courses, see Dart Rinefort or Roy Anderson.



GOLDEN GATE CHAPTER



ASHRAE

VOLUME XV NO. 5

FEBRUARY 1976

MEETING ANNOUNCEMENT

The fifth meeting of the Golden Gate Chapter for the 1975-1976 year will be held at the Berkeley Yacht Club on Thursday, February 5, 1976.

This will be our annual field trip to include the children. Bring your sons or daughters out for a fun evening. See the enclosed map on how to get there.

First, we will meet at the Berkeley Yacht Club. The social hour will begin at 5:30 PM and the dinner will be at 6:45 PM.

JANUARY PROGRAM

Carl Jordan, Chairman

FIELD TRIP: TOUR OF THE BULK MAIL HANDLING FACILITY, RICHMOND, CALIFORNIA  
Following dinner at the Berkeley Yacht Club, we will tour the U.S. Postal Service Bulk Mail Handling Facility in Richmond. Mr. Nat Hawks will be our host and guide.

NOTICE \* NOTICE \* NOTICE \* NOTICE \* NOTICE

BEGINNING WITH THE FEBRUARY MEETING, THERE WILL BE A RAFFLE OF THE RETURNED RESERVATION CARDS! AND THE ONE PICKED WILL RECEIVE A FREE DINNER FOR THAT NIGHT'S MEETING. SO SEND IN YOUR RESERVATION CARDS EARLY!

NEW CHAPTER MAILING ADDRESS

The Golden Gate Chapter has a new mailing address. All Chapter business, including change of the FOG DISPENSER mailing address, or corrections, may be sent to:

Golden Gate Chapter ASHRAE  
c/o Duplicating Associates  
370 Brannan Street  
San Francisco, CA 94107

Remember, to change your mailing address for the ASHRAE Journal, ASHRAE Guide, etc., you must also notify International Headquarters. Send change of address notice to: ASHRAE Membership, 345 East 47th Street, New York, N.Y. 10017. Be sure to give them your member number. If your title and/or company have changed, advise them of this also.

EMPLOYERS FOR OUTSTANDING DRAFTING TRAINEES

The Bay Area Engineering Society Committee for Manpower Training, Inc. (ESCMT) are about to begin a new consortium of employers to provide on the job training in the drafting field, according to Dick Charles, President of Charles & Braun, Consulting Engineers. This program is to be subsidized by various funds. In addition to providing an excellent screening for prospective trainees, ESCMT provides additional classroom instruction each week for the trainees.

Charles & Braun has participated in two of the consortiums. Their last trainee, Mr. Sal Ybarra, began in May 1964 and has progressed very rapidly to the point where he is an excellent draftsman and junior designer in the heating and ventilating and air conditioning field. Charles said that he would certainly encourage any employer who is not only looking for good drafting personnel, and at the same time help minorities enter the engineering profession.

Please call Mr. Doug Barker, the Executive Director of ESCMT at 543-3383 for more information.

HONOR ROLL

ROTH ASSOCIATES

Manufacturer's Representatives

273 Bayshore Boulevard  
San Francisco, CA 94124

Telephone  
(415) 282-2780

CORNER

PRESIDENT'S



JACK A. PALMER

Dear Members:

By the time you receive this newsletter, you should have received our 1975 - 1976 Roster. I would like to thank Dave Waterworth for the fine job of keeping the cost below our budget and getting the Roster out on time! Please advise Dave of any errors and/or omissions and we will print corrections in the "Fog Dispenser" at a later date. However, if your name did not appear in the Roster due to non-payment of your dues.....please don't complain.

Your Board has been working toward a more efficient operation; in order to reduce costs we have changed our secretarial service to Duplicating Associates, 370 Brannan Street, San Francisco, 94107. The financial aspects will be handled by the Treasurer. Another saving will be made by using our non-profit status for mailings. Please give us a chance to see how this works.

Hope to see you all at our field trip...it should be a good one!

LIFE AND FIRE SAFETY SEMINAR - FEBRAURY 12/13, 1976

In response to an urgent demand from the industry, ASHRAE has designed an in-depth two day seminar program on "Life and Fire Safety in Buildings."

The Seminar, managed and presented by MCI Symposia Inc., will be held at the Hyatt Union Square in San Francisco on February 12 and 13. The fee for ASHRAE members is \$295, and \$340 for non-members. Special "team" fees are available.

This comprehensive two-day seminar will examine contemporary designs and systems in existing buildings, particularly high-rise structures, to protect lives, control smoke and prevent fire. This program is probably the most important and timely seminar that anyone concerned with building fire and life safety can attend.

For details, contact ASHRAE/ MCI Conference, 51 Bank Street, Stamford, Connecticut 06901 - (203)359-4166.

Published monthly 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 94105, 495-4550.

OFFICERS AND BOARD OF GOVERNORS 1975 - 1976

Jack A. Palmer . . . . . President  
 Carl H. Jordan . . . . . Vice-President  
 Eugene L. Valerio . . . . . Secretary  
 Dick M. Glumac . . . . . Treasurer

BOARD OF GOVERNORS

Richard A. Charles  
 Thomas A. Gilbertson  
 James M. Holden

COPY DEADLINE

In order to meet our publication dates, we have established the following as the last possible dates that copy for the *Fog Dispenser* can be in the editor's hands.

Meeting Date	Copy Deadline
5 Feb. 1976	21 Jan. 1976
4 Mar. 1976	18 Feb. 1976
1 Apr. 1976	17 Mar. 1976
6 May 1976	21 Apr. 1976
3 June 1976	19 May 1976

KNOW A PROSPECTIVE NEW MEMBER?

Contact Membership Chairman:  
 Chuck McLaughlin . . . . (415) 326-9115  
 or Committee Members:  
 Dart Rinefort . . . . . (415) 686-6717  
 Pete Tidmarsh . . . . . (415) 376-0424

MAIL OR PHONE NEWS TO:

Nick Dann, Editor  
 FOG DISPENSER  
 337 Roebing Road  
 So. San Francisco, CA 94080  
 (415) 873-1660

MINUTES - GENERAL MEETING JANUARY 8, 1976

The meeting was called to order by President Palmer at 7:45 P.M., followed by self introductions of members and guests.

The minutes of the December 4, 1975 meeting were accepted as written.

A motion was passed to appoint the following members to a Nominating Committee to select candidates for Officers and Board Members: Palmer, Charles, Voelz, Yaffe, and Rinefort.

Dick Glumac reported progress on the 90-75/ Title 24 Seminar on February 25, 1976, and asked for volunteers to assist with registration. In addition to all members of the Board, the following men volunteered: E.Collins, T.Scavone, M.Rich, H.Huddleston, D.Rifkin, P.Tidmarsh, D.Rinefort, D.Nurisso, R.Gee, D.Vandament, D.Daniels, T.Collins, T.Campbell, R.Frenzel, W.Schultz.

Don Dickson reported on possible travel arrangements for the Dallas Meeting.

After a short break, Carl Jordan announced the field trip next month, to be a Father/Son/Daughter event.

The program moderated by Chairman Jordan consisted of narrations by Board Members of interesting problems and/or solutions from their personal experiences. Vic Bach substituted for Jim Holden.

Jack Palmer related a very costly problem involving a 100 ton dual compressor unit which failed under warranty. After taking the compressor apart, it was discovered that the wrong replacement parts were ordered.

Gene Valerio told two stories:

- Handling on a crash basis an order for complete bill of material of very special components, and making delivery as scheduled.
- His disaster involved fan-filter units: loss of representation for the specified product; an unacceptable substitute; being a middleman between a balky contractor and factory; motors the wrong voltage; sheaves the wrong size.

Dick Glumac explained the problems on a job where he followed the government design criteria but the job didn't work. Legal counsel eventually decided the government agency was responsible. The design was a typical motel control: two pipe system with a change-over circuit. The problem was solved by installing a water control valve.

Carl Jordan related five situations:

- To permit environmental control at odd hours but reduce demand on the central fan VAV system of a 20 story building, a variable air volume damper was installed at each floor.
- On a branch bank remodel with an air handler above a drop ceiling, the unit was enclosed in 3/4" to 1" transite, which successfully eliminated a potential noise problem.
- A sturdy old cooling tower was rejuvenated at the same cost as a brand new tower; result was a better and longer lasting unit.
- A water tube boiler required tube replacement during its first year; it was discovered quite accidentally that the janitors were using boiler water for their mop buckets.
- College students in a new facility became sick every day. Problem eventually traced to fumes entering air intakes across a courtyard from an auto shop. Solution at present is to control traffic in the courtyard.

Dick Charles' innovative solution on the Mt. Sutro Tower job with a high cooling load and contaminated outside air was to use eliminators, high efficiency filters and carbon. His problem job was a multi-story building with a noise in a round-to-rectangular bullhead tee, designed that way because of space limitations. It has been solved by adding ductwork on the roof at a cost of \$5000 to reduce the velocity in the tee.

Vic Bach maintained a contractor must always be innovative, especially when his bid is very low. On a job for Alameda County years ago, he hired a structural engineer to show him where to cut a hole in a wall to get a chiller into a basement, instead of following the more conservative instructions of a consultant. On the same job, he expedited delivery of the starter by agreeing to accept it in a NEMA 5 enclosure, in lieu of the NEMA 4 as ordered, then found it wouldn't fit into the elevator.

Tom Gilbertson related a humorous story of his early field days with a control company and how he learned about outdoor air reset control through a series of sad experiences. His innovation consisted of a system to partially de-superheat discharge gas in a chiller system, and use the otherwise wasted heat to heat

domestic hot water. On one installation, the added cost is calculated to be returned to the owner in 153 days.

With thanks to the participants, Palmer adjourned the meeting.

Respectfully submitted,  
 Eugene L. Valerio  
 Secretary

MEETING ATTENDANCE

JANUARY 8, 1976

Members	
Roy Graves	McClenahan Co.
Clyde Wilson Reid	Clyde Equipment Co.
Howard Friesen	G.J. Yamas Co.
Roy Gifford	Vann Engineering
Dick Frenzel	E.B. Ward & Co.
Ash Agboatwaler	Safeway Stores Inc.
Tom Spoln	Safeway Stores Inc.
Steve Sprague	Miles Suda & Assoc.
Bob Strickland	Safeway Stores Inc.
John May	Kaiser Permanente
Gus Gendler	G.L. Gendler & Assoc.
Al Eynon	G.L. Gendler & Assoc.
Henry Huddleston	Columbia Mechanical
Michael Rich	Gaffigan Co.
Dan Vandament	Dan Vandament
Dave Rifkin	Marina Htg. & A/C
Terry Scavone	Marina Htg. & A/C
Dick Friedman	Engineered Air
Bernie Beckins	Scott Co.
R.H. Judd	Montgomery & Roberts
Jim Breese	J.L. Breese
D.H. Fusioka	Consulting Engineers
H.J. Dauphinee	Jenkins Brothers
Ubo Mulder	Van-Mulder S/M Inc.
Greg Braak	Johnson Controls, Inc.
Hendrik J. Moun	Skidmore Owings & Merrill
A. Bechar	SOM
Dick Porter	G.J. Yamas Co.
C. McGrough	G.J. Yamas Co.
S. Hoogs	Owens Corning Fiberglas
Ed Wintergalen	Environmental Products
Ken Hill	Kaiser Engineers
Tom Gilbertson	L & H Air-Co.
Bob Swezey	Air Filter Control
Art Gamble	Gamble Instrument Sales
Jim Memecheck	A.A.F.
Carl H. Jordan	Skidmore, Owings & Merrill
Richard A. Charles	Charles & Braun
Jack A. Palmer	California Hydronics Corp.
Gene Valerio	Air Filter Control
Dick Glumac	Glumac & Webster
Jim Parsons	Pacific Telephone
F. Thomas Collins	Self-Consulting Engineer
Tom Namberumal	Kasin & Guttman
Karl Baldwin	Retired
Ken Lloyd	Lillard Co.
Vic Bach	Western Plmb. & Htg.
Ralph Williams	Lambert Infra-Red
Jim Curtin	Mickie Kuchi Engineers
Arel Berrier	California Hydronics Corp.
John Kraft	Cornely Co.
Pete Knezevich	Ind. Power Inc.
Dave Attard	California Hydronics Corp.
Elmo Finklebine	Engineered Air
Richard E. Gee	Bechtel
Dart Rinefort	Glumac & Webster
Bob Wistort	R.A. Wistort Inc.
Chuck McLaughlin	McLaughlin Assoc.
Rudy Pribuss	Pribuss Engineers Inc.
Fred Farmer	Heat Transfer Equipment Co.
Tom Campbell	Owens Loring Fiberglas
Charles Hardeman	C.S. Hardeman Inc.
Tom White	Old Ex- American Blower
Ed Merino	Hess, Greiner & Pollard
A. Gus Schiaerve	G.M. & T.R. Simonson
Bud Ferry	A.J. Bouey & Co.
Pete Tidmarsh	York A/C
Arlen W. Allinger	G.T. Kuntz & Co. Cons. Engr.
Jack Kniveton	Normas S. Wright & Co.
Gino Colacchia	University Mechanical
Bus Pumphrey	University Mechanical
Don Bradshaw	Owens Corning Fiberglas
Ed Beeching	Engineered Air Systems
Chuck Tarnoff	Allied Air Products, Inc.
Robert Voelz	Bentley Engineers
Ted Perkowski	E.B. Ward & Company
U.C. Bryant	U.C. Extension
Roy Anderson	City College of San Francisco
Morris Konhoff	Mechanical Consulting Co.

1976 ASHRAE ROSTER CORRECTIONS

Please make the following corrections to your Golden Gate Chapter ASHRAE ROSTER for 1976.

1. Page 5, James L. Breese is a member (M)
2. Page 10, David Hara, Company phone is 697-697-2281
3. Page 14, Stuart Malcolm is a member (M)
4. Page 15, William McVicker is a member (M)
5. Page 19, Stuart Stevenson is a member (M), and please direct mail to Mr. Stevenson's home address.
6. Page 19, Charles Tarnoff business address should be: 810 Stanton Road, Burlingame, California 94010, 697-2281.

The Roster Chairman sincerely apologizes for these errors.

David Waterworth  
Roster Chairman

(Editors Note: If there are any other corrections to the Roster that should be noted, contact the Golden Gate Chapter ASHRAE, attention Dave Waterworth. Corrections will be published in the FOG DISPENSER. ed.)

FOG DISPENSER COPY DEADLINE

Please note the new FOG DISPENSER copy deadlines published this month on Page 2.

As everyone is well aware, a 30% increase in postal costs is difficult to absorb. Your Board, facing this inflationary pressure, opted to take advantage of our organization status to use bulk mailing rates, rather than assess additional local dues.

We have had our difficulties - bulk rate in-transit times vary all over the place. We still feel that the bulk mailing rate makes good sense.

Accordingly, we have moved the copy deadline dates up. Please note these changes. Your editor will be especially grateful if you can meet, or, better, beat these deadlines if at all possible.

HONOR ROLL

An often-asked question - what is the Honor Roll?

The Honor Roll was established several years ago, and its purpose was to seek donations to the Chapter to help defray the expense of printing the FOG DISPENSER. In return, those firms participating are recognized by publishing their name - some subtle advertising, if you will.

We are most appreciative of the contributions made by our Honor Roll members, and of the willing cooperation of those firms who are asked to join.

. . . next column, please

To further pay tribute to our Honor Roll members, we will publish all names next month.

Are you a member? We'd like to add your firm to our growing list. We normally call you - but you may call us! Contact Nick Dann at 873-1660.

Thank you, Honor Roll members!

NOTES OF ANONYMOUS ORIGIN

The FOG DISPENSER has come across the following inter-office memo, from a major company who, for very obvious reasons, requires anonymity.

SUBJECT: ABSENTEEISM

It has been brought to my attention that the attendance record of the department is a disgrace to our gracious benefactor who, at your own request, has given you your job. Due to your lack of consideration, for your job with so fine a company, as shown by such frequent absenteeism, it has become necessary for us to revise some of our policies. The following changes are in effect as of today.

SICKNESS:

No excuse . . . we will no longer accept your doctor's statement as proof, as we believe that if you are able to go to the doctor, you are able to come to work.

LEAVES OF ABSENCE:

(For an operation) We are no longer allowing this practice. We wish to discourage any thoughts that you may need an operation as we believe that as long as you are an employee here, you will need all of whatever you have and you should not consider having anything removed. We hired you as you are, and to have anything removed would certainly make you less than we bargained for.

DEATH:

(Other than your own) This is no excuse . . . there is nothing you can do for them, and we are sure that someone else with a lesser position can attend to the arrangements. However, if the funeral can be held in the late afternoon we will be glad to let you off one hour early, provided that your share of the work is ahead enough to keep the job going in your absence.

DEATH:

(Your own) This will be accepted as an excuse, but we would like a two week notice, as we feel it is your duty to teach someone else your job.

Also, entirely too much time is being spent in the restrooms. In the future, we will follow the practice of going in alphabetical order. For instance those whose names begin with "A" will go from 9 to 9:15, "P" will go from 9:15 to 9:30 and so on. If you are unable to go at your time, it will be necessary to wait until the next day when your turn comes.



GOLDEN GATE CHAPTER  ASHRAE

VOLUME XV NO. 6

MARCH 1976

MEETING ANNOUNCEMENT

The sixth meeting of the Golden Gate Chapter for the 1975-76 year will be held at the Engineers' Club in the Hong Kong Bank Building, 160 Sansome Street, San Francisco, on Thursday night - March 4, 1976. The Social Hour will begin at 5:30 p.m., with dinner at 6:45 p.m.

MARCH PROGRAM

Carl Jordan, Chairman

SUBJECT: NUCLEAR INITIATIVE

Bring your WIVES and hear pro and con discussions regarding the NUCLEAR INITIATIVE. The speakers will be Mr. Dwight Cocks, representing the Californians for Nuclear Safeguards; and Mr. Lynn R. Wallis, representing Citizens for Jobs and Energy and a health physics consultant with the Nuclear Energy Division of General Electric.

MARCH WORKSHOP

Roy Anderson, Chairman 6:00-6:45 p.m.  
Upstairs

SMACNA'S REVISED LOW PRESSURE DUCT CONSTRUCTION STANDARDS

Dick Friedman of Engineered Air, who has served on SMACNA's national standards committee for the last three years, will discuss important changes in this year's edition of low pressure duct construction standards. Find out about increased options available to engineers and contractors.

ATTEND A MEETING ..... IT'S GOOD FOR YOU

NOTICE \* NOTICE \* NOTICE \* NOTICE \* NOTICE

THERE WILL BE A RAFFLE OF THE RETURNED RESERVATION CARDS! AND THE ONE PICKED WILL RECEIVE A FREE DINNER FOR THAT NIGHT'S MEETING. SO SEND IN YOUR RESERVATION CARDS EARLY!

1976-1977 NOMINATIONS FOR CHAPTER OFFICES

The Nominating Committee recommends the following slate of officers for the Golden Gate Chapter of ASHRAE, in fiscal year 1976-1977.

President	- Carl Jordan
Vice-President	- Gene Valerio
Secretary	- Dick Glumac
Treasurer	- Tom Gilbertson
Board Member	- Bob Phillips
Board Member	- James Holden
Board Member	- Jack A. Palmer (past president)

In accordance with Article 7.3 of the Chapter Bylaws, additional nominations may be made from the floor at the General Meeting, March 4, 1976.

Respectfully submitted,

Bob Voelz  
Nominating Committee

With deep regret, we inform you of the death of Mr. James A. Nelson, Jr., of the James A. Nelson Company Inc.

HONOR ROLL

LINFORD AIR & REFRIGERATION

Mr. Bob M. Linford

2850 Poplar Street  
Oakland, California

Telephone  
(415) 834-2438

Published monthly 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 94105, 495-4550.

**OFFICERS AND BOARD OF GOVERNORS**  
1975 - 1976

Jack A. Palmer . . . . . President  
Carl H. Jordan . . . . . Vice-President  
Eugene L. Valerio . . . . . Secretary  
Dick M. Glumac . . . . . Treasurer

**BOARD OF GOVERNORS**

Richard A. Charles  
Thomas A. Gilbertson  
James M. Holden



PRESIDENT'S

CORNER



JACK A. PALMER

Dear Members:

This has been a very busy month. We had a good turnout in Dallas for an enjoyable meeting and show. We had approximately nineteen members from the Golden Gate Chapter. All of whom, I am sure, would be willing to return to Dallas again.

Our field trip to the Berkeley Yacht Club for dinner and then to the Bulk Mail Facilities in Richmond was great. If you ever want to see a mechanical marvel, (nightmare), you should take a tour of these facilities. I am sorry the "Fog Dispenser" did not arrive in time for many of you to know about this meeting. I received my copy on February 9th. This delay is due to our trying to save postage by using our non-profit status. Like any new system, a start-up can be a trying endeavor, so please be patient; we are working on eliminating all problems.

We have received our membership status from National and the report is not good! We have 20% delinquent members. If you are one, please pay your dues. The money you spend on ASHRAE is minor compared to what you are receiving from this organization. It's really up to you.

The CRC meeting is going to be held in Anaheim in May. If you have any comments which you would like brought up during this meeting, please contact our delegate for this year, Mr. Carl Jordan.

**COPY DEADLINE**

In order to meet our publication dates, we have established the following as the last possible dates that copy for the *Fog Dispenser* can be in the editor's hands.

Meeting Date	Copy Deadline
4 Mar. 1976	18 Feb. 1976
1 Apr. 1976	12 Mar. 1976
6 May 1976	16 Apr. 1976
3 June 1976	14 May 1976

**KNOW A PROSPECTIVE NEW MEMBER?**

Contact Membership Chairman:  
Chuck McLaughlin . . . . (415) 326-9115  
or Committee Members:  
Dart Rinefort . . . . . (415) 686-6717  
Pete Tidmarsh . . . . . (415) 376-0424

**MAIL OR PHONE NEWS TO:**

Nick Dann, Editor  
FOG DISPENSER  
337 Roebling Road  
So. San Francisco, CA 94080  
(415) 873-1660

MINUTES - GENERAL MEETING FEBRUARY 5, 1976

The February meeting was a combined event: The Annual Field Trip, and the Annual Father/Son/Daughter night.

President Palmer opened the meeting with self-introductions at 7:35 p.m., in the dining room of the Berkeley Yacht Club, on the Marina in Berkeley.

Carl Jordan expressed the Chapter's thanks to the U.S. Postal Service for arranging the tour of the San Francisco Bulk Mail Center in Richmond. He introduced Mr. Nat Hawks, Preventive Maintenance Engineer for the facility, who was the Tour Guide.

Mr. Hawks welcomed the group and explained the tour rules relating to security and safety. Usually tours are limited to ten people.

The minutes of the January 8 meeting were approved as written.

President Palmer called for Committee Reports, but there were none.

After dinner raffle, the meeting was adjourned to the lobby of the Bulk Mail Center in Richmond.

Mr. Hawks used a scale model of the new facility to explain its operation. This Center is one of three on the West Coast (and 23 in the country) handling and sorting parcel post and fourth class mail through an elaborate computer-controlled system of conveyors, chutes, chain-pulled carts, loading-unloading mechanisms.

The group then walked through the Center, stopping along the way to observe various operations, and ending up in the main mechanical room to inspect the chillers and boilers.

Prepared by:

Eugene L. Valerio  
Secretary

1976 REGION X CONFERENCE

The Orange Empire Chapter ASHRAE will host the 1976 Region X Conference, at the Disneyland Hotel, Anaheim, May 26 through May 29, 1976.

Every effort is being made to provide attendees of this 1976 CRC Conference a very great time. Three technical sessions will be conducted in addition to the CRC business sessions. To loosen up a bit, there are many fine attractions in the area. In addition, several events have been especially arranged for the conference - a welcome cocktail party, Baraza (African Festival), President's Luncheon, Women's Tour, Golf, and a Dinner Dance.

A copy of the conference brochure is enclosed with this newsletter.

Please note the low pre-registration prices, effective for all orders mailed before April 1st.

"IN THE BANK . . . . OR UP THE CHIMNEY?"

The following are excerpts of a letter that was addressed to all Chapter Presidents from William J. Collins, Jr., President of ASHRAE.

"There is no need for me to explain the importance to all of us, individually and collectively, of conserving energy and our natural resources. I would like, however, to pass on to you an opportunity for each of us to do a little extra good work toward this end.

"A new booklet, "In the Bank . . . . or Up the Chimney?" has been produced by the Department of Housing and Urban Development with the help of an ASHRAE Advisory Committee. Copies of the booklet may be obtained from the U.S. Government Printing Office.

"Cleverly organized in a magazine-like form, "In the Bank . . . . or Up the Chimney" permits the American homeowner, regardless of sophistication and depth of concern, to rapidly inventory his home's present energy-saving condition, and to discover exactly which elements of his home are using more energy than they should. On the basis of that inventory, cost and savings information is presented. Remedies are spelled out in detail, and are described and illustrated in step-by-step, fool-proof fashion.

"Two supplementary items are available. Headquarters has copies of slides and a script to be used in connection with the booklet. Copies of a similar manual for professionals, "Cost Effective Methods to Reduce the Heating and Cooling Energy Requirements of Existing Single-Family Residences" PB 241919/IK may be obtained for \$7.50 from: U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161.

"The booklet makes this statement: "If each of us spent \$400 to fix up our homes to save energy, two things would happen:

-We'd all get our money back, and in most cases in less than five years. After that, what we'd save is money in the bank.

-Every year the amount of energy saved would be equal to about one-third of the oil we had to buy from other countries last year."

"Savings of this magnitude are worth our best efforts. I would like to suggest that you prepare a plan whereby your chapter can foster wide publicity for this publication, and the greatest possible implementation of its proposals. Your personal efforts can lead to a very worthwhile dividend for the entire country."

GLOSSARY OF AIR CONDITIONING TERMS FOR SECRETARIES

SENSIBLE HEAT-About 76°. Above that it's too damned hot.

LATENT HEAT-Unlike sensible heat, opposite, sometimes called "ridiculous heat"

TOTAL HEAT-Everything from the sensible to the ridiculous.

WET BULB-Naked tulip in the rain.

MINUTES - GENERAL MEETING MARCH 4, 1976

President Palmer opened the meeting at 7:45 PM at the Engineers Club in San Francisco with self-introductions, noting that this meeting was the annual "Wives Night".

Minutes of the February 5, 1976 meeting were approved as published.

On a call for Committee Reports, Steve Sprague noted that Manpower Training (ESGMT) was starting a 42 week program in mid-March, and those interested should call him for information.

Palmer called for additional nominations from the floor for Officers and Board Members supplementing those made by the Nominating Committee as published last month. There were none: it was moved and seconded that nominations be closed.

After a break, Bob Rogers, an ACR instructor at Cal Poly, explained the presence of some 20 Cal Poly students who were Chapter guests at the meeting. He thanked the Chapter for financial Workshop support, and invited all to attend "Poly Royal" on April 23 and 24.

Program Chairman Jordan then explained that the scheduled speakers had to cancel, and substitute speakers were introduced: Ed Margason, a consulting civil engineer, representing Citizens for Yes on Proposition 15, and Paul Schmitz, a Nuclear Environmental Engineer with Bechtel, representing Citizens for Jobs and Energy. These speakers then presented opposing arguments on the Nuclear Initiative, Proposition 15, to be placed before California voters in June.

Ed Margason was the first speaker, who stated that the more energy we use, the more garbage there will be, and we have an energy crisis because we waste energy.

- a. The energy budget is out of balance, and this has led to Prop. 15, the Nuclear Safeguards Act, because people have doubts about the present stage of nuclear development. Prop. 15 will establish a public forum to resolve the doubts within a 5 year time span. It is not a moratorium, or a shut-down of nuclear power.
- b. While both sides disagree about the issues, they do agree that expansion means risks, and there are alternative power sources available.
- c. Prop. 15 seeks to establish four judgement points: removal of insurance liability limits; demonstrative proof of safety; proven safe storage of wastes; and evacuation plans in case of air release of radioactivity.
- d. The proposition includes two important clauses: amendments need 2/3 vote by both houses; and the provisions of the act are severable, meaning if a provision is held invalid, the rest remain valid.
- e. The proposition is reasonable and flexible in placing proof of safety on the industry, not the people, and it seeks final public resolution of the safety issue.

Paul Schmitz was the second speaker, and he presented arguments against the proposition. He first mentioned his 27 years of experience in the industry both with General Electric and Bechtel.

- a. He stated the primary issue is energy and the need for it. One side says we have sufficient energy and don't need plants built for 10-15 years, but in reality we face serious energy problems in the 1980's, since it takes 9 years to build a nuclear plant.

continued

- b. We operate on an oil and gas economy; 90% of our energy is obtained from these sources. At present we are running an energy deficit equivalent to 7 million barrels of oil per day (this must be imported) on a usage of 37 million per day. By 1985, we will be using 58 million barrels, but we cannot increase oil/gas production. We might conserve 8 million, increase coal production 4 million, continue nuclear programs for 4 million, resulting in a 1985 energy equivalent deficit of 12 million.
- c. He argued we need all three energy sources to reduce the deficit, and in the next 9 years we cannot count on non-depleting sources to make up the deficit if nuclear power was curtailed.
- d. Citing the present safety record, he stated 59 large nuclear plants are operating, 68 are under construction, and 228 more are planned. Nuclear power provides 8 1/2% of our total energy; in Chicago, 50% of power used is nuclear-generated. The industry has amassed 239 reactors years of operation without injury to the public. Safety systems have been tested by manufacturers and the government. A large scale safety test is scheduled for Idaho Falls next year, but safety can't be proven for sure for 5 years.
- e. Speaking about reprocessing of spent fuel, he stated a plant is under construction in North Carolina now, and there are a number of plants operating throughout the world. Relative to waste disposal, a vitrification process has been developed in Richland, WA, and the first permanent disposal site will be operational in the 1980's.
- f. Concerning liability, the present limits were placed on the industry by Congress. Government liability insurance is being phased out; private insurance carriers must take over. If the initiative is passed, plants won't be built; private insurance carriers must have limits. The initiative will shut down the plants, then how would energy problems be met?

A question and answer period followed, with both speakers participating. Questions were asked about the validity of the data; philosophy of opposing sides; use of water and plant location; codes; insurance; waste disposal; and plans for initiatives in other states.

Mr. Margason summarized with a 1919 poem about the atom, and said the issue is serious, in that nuclear power should be debated in the public arena. The proposition will resolve the safety issue to establish this forum.

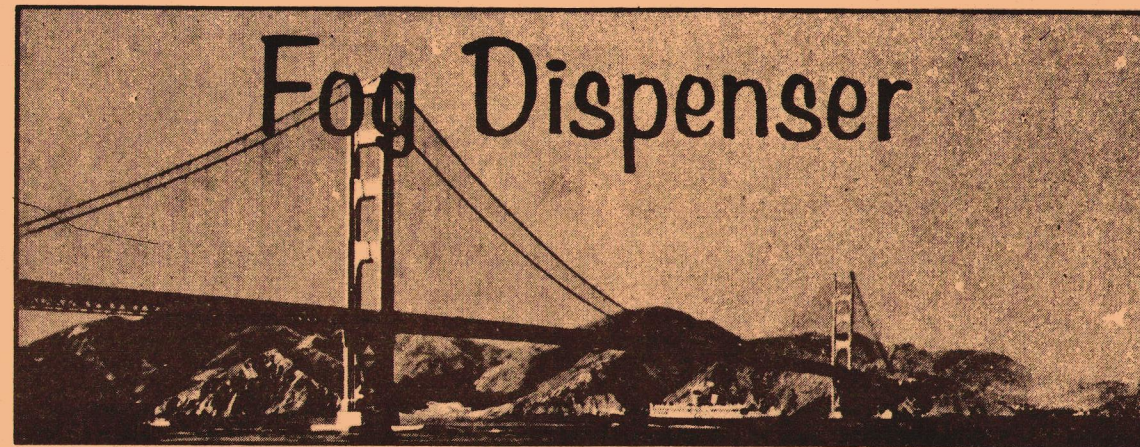
Mr. Schmitz summarized by saying that our oil imports have increased 50% in two years while power available from the Northwest is going down. He agrees we should conserve energy first before constructing more plants, but the proposition is a shut down, and importing more oil makes us susceptible to international blackmail.

With thanks to our speaker, Vice-President Jordan adjourned the meeting.

Prepared by:

Eugene L. Valerio

Secretary



GOLDEN GATE CHAPTER



ASHRAE

VOLUME XV NO. 7

APRIL 1976

MEETING ANNOUNCEMENT

The seventh meeting of the Golden Gate Chapter for the 1975-76 year will be held at the Engineers Club in the Hong Kong Bank Building, 160 Sansome St., San Francisco, on Thursday night, April 1, 1976. The Social Hour will begin at 5:30 PM, with dinner at 6:45 PM.

APRIL PROGRAM

Carl Jordan, Chairman

SUBJECT: SOLAR ENERGY

Dr. L.B. Anderson of Palo Alto Research Laboratory will make a presentation regarding the design of building solar heating and cooling systems--a challenging professional assignment.

APRIL WORKSHOP

Roy Anderson, Chairman 6:00-6:45 PM  
Upstairs

INTERMITTENT PILOTS ON GAS APPLIANCES-A COMING REQUIREMENT?

Mr. Herb Duncan of Flame Air, Inc. will talk about intermittent pilots on residential gas appliances. He will discuss the background and development of these new pilots, and also comment on the public utilities actions and manufacturers responses to the legislative desire, currently expressed in a State Bill, to outfit all residential gas appliances with intermittent pilots.

ATTEND A MEETING . . . . . IT'S GOOD FOR YOU

NOTICE \* NOTICE \* NOTICE \* NOTICE \* NOTICE \*

THERE WILL BE A RAFFLE OF THE RETURNED RESERVATION CARDS! AND THE ONE PICKED WILL RECEIVE A FREE DINNER FOR THAT NIGHT'S MEETING. SO SEND IN YOUR RESERVATION CARDS EARLY!

1976 REGION X CONFERENCE

Don't forget the 1976 Region X Conference at the Disneyland Hotel, May 26 through May 29, 1976.

This years Conference is hosted by the Orange Empire Chapter ASHRAE. CRC General Chairman John Sosoka promises that his will be a "very great" meeting.

Three technical sessions are planned as outlined in the program you received with the FOG DISPENSER last month.

In addition to the many fine attractions in the area - Disneyland, Knotts Berry Farm, etc. etc., many special events have been arranged especially for the Conference. A special "CRC Update" is enclosed which describes these these and other details.

A Disneyland Hotel registration form is also enclosed for your convenience.

If you have any questions, ask one of our Board Members at the next meeting.

HONOR ROLL

SPARTAN ASSOCIATES

Mr. George Dale

2791 Crow Canyon Rd.  
San Ramon, California

Telephone  
(415) 837-1375

Published monthly 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 94105, 495-4550.

**OFFICERS AND BOARD OF GOVERNORS**  
1975 - 1976

Jack A. Palmer . . . . . President  
Carl H. Jordan . . . . . Vice-President  
Eugene L. Valerio . . . . . Secretary  
Dick M. Glumac . . . . . Treasurer

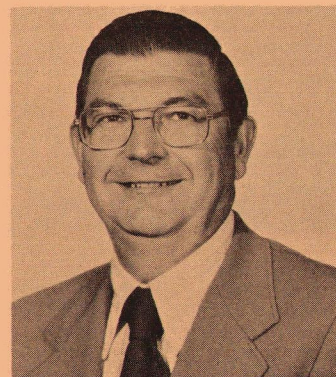
**BOARD OF GOVERNORS**

Richard A. Charles  
Thomas A. Gilbertson  
James M. Holden



PRESIDENT'S

**CORNER**



JACK A. PALMER

Dear Members:

I am happy to report that your Chapter conducted a very successful 90-75 Seminar thanks to the well organized committee headed by Dick Glumac. We had a total paid attendance of 284. The average attendance after sixty Seminars throughout the nation has been 74! I want to thank Tom Campbell for being our Master of Ceremonies and Bob Voelz and J. Robert Roberson for their excellent presentation.

Our own Golden Gate Seminar will be held on April 20th from 6:30 p.m. to 9:30 p.m. and each succeeding Tuesday through May 11th. Our seminar will be an update of heating and air-conditioning codes on energy, seismic and life safety. Be sure to keep these dates open and please spread the word. Remember, the funds we collect on this seminar go towards scholarships and Ashrae Research so here's a chance to help yourself and others at the same time!

Our March meeting on Nuclear Initiative was very thought provoking. The speakers knew their subject very well. I am sure this debate will not be settled - even by an election.

Your Chapter was host to the Cal Poly Air-Conditioning Club in which twenty members attended our meeting. Bob Rogers, a teacher in the Air-Conditioning and Refrigeration program, thanked all members for their donations toward the Cal Poly Workshop. Please consider a donation regardless of size . . . every dollar helps!

Our Annual Social will be on Saturday, May 1st, at the Peacock Gap Country Club. Jerry Kechter and Glen Mantoani promise another great evening . . . so save your pesos!

**COPY DEADLINE**

In order to meet our publication dates, we have established the following as the last possible dates that copy for the *Fog Dispenser* can be in the editor's hands.

Meeting Date	Copy Deadline
1 Apr. 1976	12 Mar. 1976
6 May 1976	16 Apr. 1976
3 June 1976	14 May 1976

**KNOW A PROSPECTIVE NEW MEMBER?**

Contact Membership Chairman:  
Chuck McLaughlin . . . . (415) 326-9115  
or Committee Members:  
Dart Rinefort . . . . . (415) 686-6717  
Pete Tidmarsh . . . . . (415) 376-0424

**MAIL OR PHONE NEWS TO:**

Nick Dann, Editor  
FOG DISPENSER  
337 Roebling Road  
So. San Francisco, CA 94080  
(415) 873-1660

**MEETING ATTENDANCE**

MARCH 4, 1976

**Members:**

Bill Schultz	Powers Regulator Co.
John Capitolo	Johns. Manville Sales Corp.
Hendrik Movw	Skidmore Owings & Merrill
Karl Baldwin	Retired
Tom Namberumal	Kasin & Guttman
K. Guttman	" "
Greg Braak	Johnson Controls
Paul Evens	Pacific Gas & Electric
Jerry Kasin	Kasin & Guttman
Arel Berrier	Calif. Hydronica
Jack Kniveton	Norman Wright & Co.
Tom Campbell	Owens Corning Fiberglass
Tom Connoy	Clyde Equipt. Co., Inc.
Jim Nemechek	AAF
Jim Holden	Marinways
Ed Wintergalen	Environmental Products
Jack Palmer	California Hyronics
Clyde Wilson-Reid	Clyde Equipment
Gene Valerio	Air Filter/Control
Tom Gilbertson	L & H Airco
Carl H. Jordan	Skidmore, Owings & Merrill
Dick Charles	Charles & Gravin
Dick Glumac	Glumac & Webster
Roy Anderson	City College S.F.
Earl Carrier	Consultant
Dart Rinefort	Glumac & Webster
A.C. Bryant	U.C. Extension
Al Eynon	G.L. Gendler & Assoc.
John Werner	The Trane Co.
Wayne Jin	Skidmore, Owings & Merrill
Robert Denney	L.L.L.
Richard Ronnow	Linford Air & Refrigeration
Jerry Huffman	Carrier Air Conditioning
Gino Colacchia	University Mechanical
Robert Voelz	Bentley Engineers
Richard Schemmert	Bechtel Inc.
John Lewis	Skidmore Owings & Merrill
Pete Tidmarsh	York A/C
Roy Gifford	Vann Engineering
Bernie Beckins	Scott Co.
Lew Pollocn	Trane Company
Mike Cory	Vann Engineering
Bob Swezey	Air Filter/Control
Hank Shastany	Westates Pacific
Wei Lin Hsia	Bentley Engineering
Pete Knezevich	Ind. Power
Bob Wistort	Retired
Bob Phillips	Kennedy Engineers
Gus Schjaerve	F.M. & T.R. Simonson
Grant Bentley	Bentley Engineers
Dave Rifkin	Marina Htg. & Air Cond.
Terry Scavone	" " "
Jim Parson	PT & T Company
John Brose	The Brose Company
Kaz Inovye	Skasin, Guttman & Assoc.
Steve Sprague	Miles Suda & Assoc.
Richard Oas	Safeway Stores Inc.
Bob Judd	Montgomery Roberts
Jim Curtin	Speedy Gonzalez Airlines
Woody Googs	Owens Corning Fiberglass
Max Wolff	Dill & Sederberg
Rod Roberts	Montgomery & Roberts
Peter Filios	Flame Air
Rich Wells	Montgomery & Roberts
George Aronovsky	Aronovsky & Assoc.
F.M. Palacios	USPS
Dan Vandament	Consulting Engineer
Vince Aiello	Vann Engineering

**Guests:**

H.P. Harvey	Johns Manville Sales Corp.
Tom Reinarts	Keller & Gannon
Bob Rogers	Cal Poly - S.L.P.
Paul Schmitz	Bechtel Power

continued

Van Charles	Associate
Nek Palt	Cal Poly
James Motz	" "
Jerry Carpenter	" "
Brian Hearin	" "
Denny Mark	" "
Jack Zarove	" "
John McSahini	" "
Salud Pay	" "
Saivl Vellawen	" "
Jack Nourafshan	" "
Tom Molinaro	Carrier Air Conditioning
Bob Roos	" "
Steve Lewis	Cal Poly
Leroy Erikson	Bechtel Inc.
Elmo Finkabind	Central Air Concord
Paul Hayasin	Scott Company
Dick Fromm	W.T. Facn Company
Bill Lohse	P.T. & T. Company
Louis Pietrelli	Cal Poly
George Kiperash	" "

**Wives:**

Mildred Movw	Adeline Baldwin
Dorothy Namberumal	Juanita Gilbertson
Wilma Jordan	Durdica Glumac
Dotty Rinefort	Sarah Cory
Virginia Gifford	Gertrude Finkabind
Flo Beckins	Sue Swezey
Dorothy Brose	Miki Inouye
Sally Sprague	

**1976 TECHNICAL DEVELOPMENT SEMINAR**

Plan now to attend the Golden Gate Chapter's 1976 Technical Development Seminar - "Heating and Air Conditioning Up-Date . . . . . Energy, Seismic & Life Safety . . . . . Does Your Facility Conform?" There will be four sessions - April 20 & 27, and May 4 & 11. Early registration is suggested. Fee is only \$25.00 Contact Tom Gilbertson at 543-6766 for details.

**ASHRAE RESEARCH FUND**

Our thanks to the following members of Golden Gate Chapter ASHRAE who have contributed to the ASHRAE Research Fund for the year ending December 31, 1975.

**JYA Consulting Engineers**

John L. Brose  
Harold W. Eagleson  
Richard E. Gee  
Theodore S. Gerogiou  
Dick M. Glumac  
Alonzo C. Laws  
Edwin C. Litsinger  
Dale Joe Missimer  
Fernando M. Palacios  
Jack A. Plamer  
Miles N. Suda

Continued . . . .

Jordan introduced the main speaker, Dr. Lawrence Anderson of the Lockheed Palo Alto Laboratory, whose topic was the design of solar-powered heating and cooling systems for buildings, using the City of Santa Clara project as a reference, illustrated with slides. Dr. Anderson's main points follow.

ASHRAE must take a leadership role; the challenge is energy management, since there is no economic justification for solar energy in heating and cooling buildings. Tax credits are needed for commercial properties; the mechanical engineer's talents are all important, and computer design is required for life cycle costs, energy rates, and optimizing systems and controls.

Lockheed Palo Alto Laboratory was hired by the City of Santa Clara to write the ERDA proposal, provide the design (they used Phil McCoy for the mechanical portions) and provide consultation services for the project.

The city had to modify their usual contractual stance since it could not get performance bonds or guarantees.

ASHRAE should develop certification procedures on solar equipment, which is non-linear, and as such it is difficult to predict cooling performance.

Slides illustrated the building, system schematics, and construction work. Illustrated was the cold tank stratification required for smooth system operation.

Lockheed-designed collector panels with copper absorber plates were used. Flat plates were found to be better than tracking collectors in Santa Clara.

Loads vs. energy sources were computer-simulated. Weather was found to be of major importance. It is expected that 22.5% of total annual energy usage must come from sources other than solar.

In response to questions, Dr. Anderson stated:

- a. The 30,000 square foot building is estimated to cost \$1,000,000, with the solar heating and cooling system comprising half of the total cost. The major cost is labor; the collectors cost \$100,000 (6500 sq. ft. at \$15-16 per sq. ft.).
- b. They used Transis and Solardyne computer programs.
- c. His estimate of solar system payback time is:
  - Pool Heating - positive and immediate
  - Domestic Water Heating - no advantage
  - Heating and Cooling - 30 years

. . . . Continued Next Column

Continued . . . .

- d. The Santa Clara project is at 969 Keily Boulevard, across from Kaiser Hospital.

Carl Jordan closed with thanks to Doctor Anderson, and the meeting adjourned.

Prepared by:

Eugene L. Valerio

Secretary

ASHRAE WORKSHIP PLEDGE

"The time has come," the Chairman said,  
 "To talk of many things;  
 "Of birds and Spring and income tax,  
 "And worries April brings - -  
 "Like pledges to the Chapter made,  
 "And arrows fortune slings."

"But wait a bit," the slow ones cried,  
 "Before we have our chat;  
 "For some of us are out of dough,  
 "Not all of us are fat."

"Just two weeks more," the Chairman said,  
 "For the College goes 'Kersplaht!'

"It was so kind of you to pledge,  
 "And you are very nice,  
 "But now the time has come to pay;  
 "We cannot shake the dice.

"So pay it up, like boys true-blue,  
 "And make the sacrifice."

VOLUNTEER - - - OR BE DRAFTED !

So you thought "The draft" was ended? Not according to Carl Jordan !

It's time to volunteer for committee-work for the 1976-1977 year.

Enclosed with this month's FOG DISPENSER is a Committee Volunteer Survey on which we ask that you indicate your preferences to assist your Chapter - - - and get involved.

Take a moment to complete the form, and send it to Carl Jordan. Remember, you get so much more from ASHRAE if you "put a little in".

C'mon ! Volunteer ! Or be drafted !



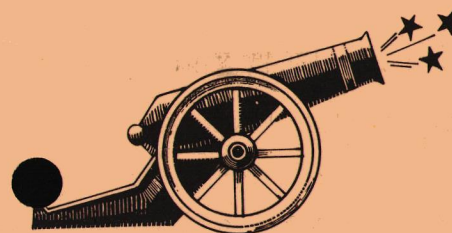
GOLDEN GATE CHAPTER



ASHRAE

VOLUME XV NO. 8

MAY 1976



GOLDEN GATE ASHRAE  
ANNUAL CHAPTER SOCIAL

A BICENTENNIAL CELEBRATION



PEACOCK GAP COUNTRY CLUB  
SATURDAY, MAY 1, 1976 - SAN RAFAEL

COCKTAILS 6:30  
DINNER 7:30

\* DIXIELAND MUSIC - DIXIELAND DRESS \*

Music by

ROD ROBERTS AND HIS SCORCHED AIR TUNE BENDERS

RSVP before April 26, 1976. Please call  
Dick Glumac at 398-7667

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Mr. Bob Sarro  
Sacramento, Ca.  
(916) 381-4800

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Eugene L. Valerio . . . . . Secretary  
Dick M. Glumac . . . . . Treasurer

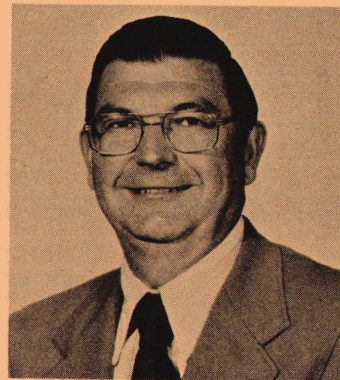
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James M. Holden



PRESIDENT'S

**CORNER**



JACK A. PALMER

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**KNOW A PROSPECTIVE NEW MEMBER?**

Contact Membership Chairman:  
Chuck McLaughlin . . . . . (415) 326-9115  
or Committee Members  
Dart Rinefort . . . . . (415) 398-7667  
Pete Tidmarsh . . . . . (415) 376-0424

**MAIL OR PHONE NEWS TO:**

Nick Dann, Editor  
FOG DISPENSER  
337 Roebling Road  
So. San Francisco, CA 94080  
(415) 873-1660

Dear Members:

Enclosed with this Fog Dispenser is a request for funds for Ashrae Research.

I am including this for you members who might want to contribute directly to Research. I know many of you do not attend our Seminars where we raise the funds for National. Please contribute any amount, every dollars helps and all donations are fully tax deductible. Please make checks payable to Ashrae Research Fund.

May will be a busy month. We have our Social on May 1st and then on to Anaheim for our Region X - C.R.C. Meeting. All members and wives are invited. These meetings are enjoyable, interesting, and educational! If you need additional information, please let us hear from you.

Tony Costa is doing a fine job with the Cal Poly Workshop; please send in your contributions today payable to Golden Gate Ashrae Workshop.

Our April meeting on Solar Energy was very interesting. Our speaker verified that solar energy is not economically feasible for heating or cooling at this time.

**TREASURERS REPORT**

FOR MONTH ENDING	TOTAL ASSETS	TOTAL LIABILITIES	MEMBERS' EQUITY	TOTAL LIABILITIES AND EQUITY
March 1976	\$2847.84	\$1700.00	\$1147.84	\$2847.84

**MEETING ATTENDANCE**

APRIL 1, 1976

**Members:**

Kaz Inouye  
Howard Friesen  
Bob Phillips  
Steve Sprague  
Dave Rifkin  
Dan Vandament  
Max Wolff  
Pete Filios  
Hank Shastany  
S.K. Datta  
John Lewis  
Clyde Wilson-Reid  
Grant Wong  
Duane Hanson  
Tom White  
Arel Berrier  
Russ Green  
Sherman Brown  
Morris Konhoff, Jr.  
S. Hoogs  
Tom Campbell  
Mike McElya  
Richard Oas  
Bill Schultz  
Tom Reinarts  
Bob Carter  
Jim Parsons  
Jack A. Palmer  
James M. Holden  
Tom Gilbertson  
Dick Charles  
Dick Glumac  
Eugene L. Valerio  
Frank Gonden  
Robert Voelz  
Carl H. Jordan  
Roy Anderson  
Dart Rinefort  
Chuck McLaughlin  
Grant Bentley  
Dave Daniels  
K. Wittman  
R.D. Caughron  
Lyle Schuelke  
D.H. Fujioka  
Ihsan Ali  
Donald Nurisso  
Pat Patterson  
Al Scavino  
Ed Beeching  
Ken Lloyd  
Leo Dwyer  
John Brose  
Arlen Allinger  
Tim Marshall  
Art Gamble  
Dale Missimer  
Kenneth Hill  
Sam Yamoto  
Dave Attard  
Bob Swezey  
Dick Friedman  
Miles Suda  
Hendrik Movv  
Tony Costa  
Jim Curtin  
A. Nenechek  
A. Eynon  
R.F. Giovannini  
Dale Briggs

Kasin, Guttman & Assoc.  
F.J. Yamas Co.  
Kennedy Engineers  
Miles Suda & Assoc  
Marina Air Conditioning  
Consulting Engineer  
Dill & Sederberg  
Flame Air  
Westates Pacific  
S.O.M., S.F.  
S.O.M.  
Clyde Equipment  
Gayner Engineers  
Gayner Engineers  
Gayner Engineers  
Calif. Hydronics  
ITT General Controls  
York/Borg-Wagner  
Mechanical Consulting Co.  
Owens Corning Fiberglass  
Owens Corning Fiberglass  
Owens Corning Fiberglass  
Safeway Stores Inc.  
Powers Regulator Co.  
Keller & Gannon  
Keller & Gannon  
P T & T  
Calif. Hydronics Corp.  
Marinways, Inc.  
L & H Airco  
Charles & Braun  
Glumac & Webster  
Air Filter/Control  
Bentley Engineers  
Bentley Engineers  
Skidmore, Owings & Merrill  
City College, S.F.  
Glumac & Webster  
McLaughlin Assoc.  
Bentley Engineers  
Berkeley Solar Group  
Kasin, Wittman & Assoc.  
Caughron Assoc.  
L.O. Schuelke Co., Inc.  
Consulting Engineer  
Ali & Assoc.  
Bechtel  
Pameco-Aire  
Engineered Air Systems  
Engineered Air Systems  
Lillard Company  
Ralston & Dwyer  
Tag Brose Co.  
G.M. & T.R. Simonson  
ITT Fluid Handling Div.  
Gamble Inst. Sales  
Polycold Systems  
Kaiser Engineers  
Beamer/Wilkinson  
Calif. Hydronics  
Air Filter/Control  
Engineered Air Systems  
Miles Suda & Assoc.  
Skidmore Owings & Merrill  
Tony Costa, Engineer  
Michi Kuchi Corp.  
Amer. Air Filter  
G.L. Gendler & Assoc.  
Thermal Mechanical  
Westates-Pacific

Continued . . . . .

Herb Duncan  
Gus Gendler  
Michael Rich  
Henry Huddleston  
Abraham Bechar  
Flame Air  
Gendler & Assoc., Inc.  
Gaffigan Company  
Columbia Mechanical  
Skidmore Owings & Merrill  
Guests:  
Bernd Kopke  
Duane Harrison  
Siddique Anwar  
Clarence Koor  
Dan Cadd  
Bill Lohse  
Harold Mueller  
L.B. Anderson  
Gina Anderson  
John Basch  
Dennis Wellinger  
Gary Gerber  
Roy Knopp  
Dale Yager  
Corey Waters  
Paul Pribuss  
Fred Hawley  
Joe Loudon  
Ralph Craig  
Michael Rich, Jr.  
Westates-Pacific  
Westates-Pacific  
SOM  
Lockheed Research Lab  
Owens Corning Fiberglass  
P.T. & T. Company  
P.T. & T. Company  
Palo Alto Research Lab  
Cal Air  
Glumac & Webster  
Student U.C.(Berk.)  
Westinghouse  
The Brose Company  
Pribuss Engineers, Inc.  
SOM  
Westates-Pacific  
Thermal Mechanical  
Gaffigan Company

**MINUTES - REGULAR MEETING** APRIL 1, 1976

President Palmer opened the meeting at 7:40 PM in the Dining Room of the Engineers Club in San Francisco with a call for self-introductions.

The minutes of the March 4 meeting were approved with a correction: Jordan thanked the speakers, not as written "speaker".

Al Scavino announced a National Environmental Balancing Bureau meeting on April 28, 29, 30 at the Hyatt Union Square Hotel, and invited members to meet the National Board of Directors on April 29.

Tony Costa made an appeal for Cal Poly Workshop funds.

A copy of a draft ERDA Solar Heating Handbook was displayed. ERDA is inviting comments from interested ASHRAE members.

Complaints were voiced about non-receipt of the newsletter.

Mike Rich proposed a motion that the dinner menu be more varied, but it was not carried.

Palmer announced the next meeting will be the annual social on May 1, and the Golf Day will be June 4.

Hank Huddleston, Chairman of the Teller's Committee, announced that the Committee had counted the ballots, and all the officers and board members as proposed for the coming year were elected.

Palmer reminded everyone of the Technical Development Seminar which will start on April 20.

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