



VOLUME XXI NO. 1

October 1981

MEETING NOTICE

DATE: OCTOBER 1, 1981
 TIME: 5:30 Social Hour; 6:30 Dinner
 PLACE: ENGINEERS' CLUB
 16th Floor
 180 Sansome St.
 San Francisco

PROGRAM: " THE EFFECT OF PASSIVE SOLAR DESIGN ON TITLE 24 NON-RESIDENTIAL ENERGY REGULATIONS"

A panel discussion of passive solar design requirements to be included in Title 24 Energy Regulations for new non-residential buildings.

The panel will include John Schade, of the California Energy Commission, Karl Guttman, Guttman & McRitchie, and Zulfikar Cumali, CCB/Cumali Associates.

-- N O T I C E--

Inflation Strikes Again... due to increased costs dinners will be \$11.50 at the Engineers' Club this year...

HONOR ROLL

UNIVERSITY MECHANICAL
 Engineers & Contractors
 400 Hester St.
 San Leandro, CA 94577
 (415) 562-0355

Gino Colacchia
 Bill Lieber

Contact Gino Colacchia at University Mechanical, (415) 562-0355, to have your place reserved on the Honor Roll

ATTENTION - ATTENTION

The Board of Directors has voted to increase annual dues to \$18.00 for all dues received after November 5, 1981

1981 - 82 MEETING DATES

Meetings will be held on the following dates: October 1, November 5, December 3, January 7, February 4, March 4, April 1, and June 3. Don't miss 'em...

PRESIDENT'S COLUMN

Welcome to Golden Gate Chapter's 44th year of operation! I wish to thank the many gracious members who have offered to help by serving on one of our 23 committees. Most committees currently are staffed with only the minimum number of members. If you are not already a member of a committee, won't you join the committee of your choice by contacting the Chairman?

In addition to the nine general meeting programs being organized by our Program Chairman, Tom Campbell, the following additional major topics are planned:

- HVAC code consultation, review, and preparation of comments and objections to code writing groups.
- Energy conservation, design awards program, monitoring of developing concepts.
- Manpower Training and Employment.
- Membership Drive.
- ASHRAE Research Promotion Drive.
- Education and Scholarship Programs.
- Technical; 4 evening session seminars
- Solar Energy Development and Monitoring program.
- Tabletop Show with ASPE

... continued p.3

MINUTES FROM LAST MEETING

June 4, 1981
Attendance: 44 Members
20 Guests

1. The meeting was called to order at 7:30 PM by President James Holden at the Engineers' Club in San Francisco.
2. Minutes of the April meeting were approved as printed in the Fog Dispenser.
3. President Holden explained the reason for asking the Past-Presidents to pay for their own dinners, which is break with tradition. The chapter treasury is at its' lowest level in many years. This is due to a relatively low income from this years' Seminar together with contributions of \$3,000 to ASHRAE Research, \$1,000 to the Cal Poly Workshop and \$500 to the City College of San Francisco.

President Holden expressed special thanks to co-chairmen Carl Jordan and Gus Gendler for the fine job they did in securing donations for the Research Fund.

4. It was announced that Jim Nemechek is working diligently on a table-top display meeting which will be sponsored jointly with ASPE. This meeting will take place at Fort Mason. Chapter member Ken Hill is currently President of ASPE and indicated that a lot of hard work is going into the program.

5. President Holden installed Bob Phillips as the new president of the Golden Gate Chapter for the 1981 - 1982 fiscal year.

6. After a short break, President Phillips reconvened the meeting. He asked each of

... continued p. 3

GOLDEN GATE CHAPTER ASHRAE

1981-1982

OFFICERS

Robert Phillips
Thomas Campbell
James Taylor
Kevin Dowling

President
President-Elect
Secretary
Treasurer

BOARD OF DIRECTORS

James Nemechek
David Rifkin
James Holden

REGIONAL DIRECTOR

John Harnack

COMMITTEE CHAIRMEN

COMMITTEE

Auditing
Code
Education
EJC
Energy Conservation

ESCMT
Fog Dispenser
Golf
Historian
Honors and Awards

Honor Roll
Membership
Publicity
Raffle
Reception

Research/Promotion
Roster
Scholarship
Seminar
Solar Energy

CHAIRPERSON(S)

John Lewis/Wm. Baker/H. Mow
Harjinder Ajmani
Jack Zarour
Thomas Reinarts
Douglas Daniels/Robert Braun

Donald Bryant
Richard Wells
Peter Filios
Thomas White
James Holden

Gino Colacchia
Richard Leao/Richard Gee
Richard Mayer
Michael Lynch/Richard Hughes
Thomas Judson/Alice Meyer

Sherman Brown
Kamal Moinzadeh
Bruce Montgomery
Grant Bentley/Philip Russo
Glenn Claycomb

BOARD LIAISON MEMBER

R. Phillips
T. Campbell
K. Dowling
R. Phillips
K. Dowling

J. Holden
J. Holden
J. Nemechek
D. Rifkin
J. Holden

D. Rifkin
R. Phillips
R. Phillips
J. Taylor
J. Taylor

R. Phillips
J. Taylor
T. Campbell
J. Nemechek
K. Dowling

D. Rifkin
J. Nemechek
T. Campbell

Table Top Show
Temperature Data Book
Tennis

DavidRifkin/Robert Roach
James Nemechek/Richard Charles
Jack Kniveton

COMMITTEE NEWS

NEWS OF MEMBERS

PROGRAM - Thanks to those who responded to the June 1981 Questionnaire regarding programs for our general meetings. The results of this survey are:

Congratulations to KREYNE SATO, of Syska and Hennessy, for receiving a CSI Honorable Mention Award in the 1981 Specifications Competition. Mr. Sato directed the Mechanical and Electrical design team for the Central Terminal Modernization of the San Francisco International Airport

Program	Meeting Attendance	Avg. Rating*	Survey Resp.#
Panel Discussion	95	7.6	21
Speaker-Technical	104	6.8	21
Speaker-Topical	74	6.7	16
Field Trip	100	7.4	19

-In Memoriam-

Paul T. Jay, a member of Golden Gate Chapter ASHRAE, died on June 18, 1981. He was 54 years of age.

For the past nineteen years Paul was a HVAC engineer for the San Francisco Airport Commission. Prior associations were Bechtel Corp., Morriss Guralnick & Associates, and Hunter's Point Shipyard.

*Rating based on 1 (poor) to 10 (excel.)

DICK GLUMAC reports that the City of San Francisco Computer Center Code Coordinating Committee was formed two months ago to resolve inconsistencies in code requirements and interpretations regarding:

- Fire protection under raised floors
- Area of underfloor zones
- Type of electrical wiring & cables
- Detection systems & interfaces with ventilation & power

The committee is composed of engineers, contractors, UL officials, building owners, and local code officials.

The committee's end product is expected to be two-fold:

- Issue of a single code book containing all various requirements
- Recommended changes to the SF Building Code which presently is under review

... Minutes continued...

... continued...

the past-presidents who were present to give a brief discussion of what they felt were the highlights of their terms in office.

which divided the work among three board members. This became the model which National has developed and distributed to all the chapters.

Gene Valerio, 77-78, indicated he doesn't remember too much of his term.

Lewis Pollack, 73-74, remembered the people, the good times, and the great experience which has helped him in his business career.

Carl Jordan, 76-77, expressed his feeling that President Holden had done an outstanding job this year working with a Board of Governors which didn't always see eye to eye with him. He had accomplished a great deal of good for the chapter.

7. The next meeting will be held October 1, 1981, at the Engineers' Club.

8. The meeting was adjourned at 9:40 PM.

PRESIDENT'S COLUMN
...continued...

Gus Gendler, 65-66, felt that the opportunity to work with the great people who made up the membership of the chapter was extremely beneficial. During his term, the first annual Seminar was held, which became the principal money raising event for the Golden Gate Chapter.

-Data Book; updated and enlarged edition developed, published, and distributed in conjunction with So. Cal. Chapter.

-Golf and Tennis Tournaments, Meeting Raffles, and Field Trip.

Arel Barrier, 66-67, indicated his fondest memories were the great people he worked with.

We are very fortunate to have Rich Wells serve again this year as Fog Dispenser Editor. Rich would appreciate your comments and input of items of interest for inclusion in our monthly newsletter (considered by many of us to be one of the best around).

George Aranovsky, 70-71, recalled that it was during his term that the Golden Gate Chapter became incorporated.

Richard Gee has accepted the job of trying to come up with some meeting attendance and membership increasing recommendations which can be presented to the Board and the members. If you have a suggestion which you think might improve our membership and meeting attendance please call Dick at 768-0429. He'd be most appreciative.

Dick Charles, 74-75, felt that the opportunity to meet people, work with them as they move through the chairs, and begin to get the wives involved was the highlight of his term in office.

Come and join us at our October 1st general meeting!

Bob Phillips
President

Jack Kniveton, 63-64, indicated that the Cal Poly Workshop was begun during his term. He sees nothing wrong with having past-presidents pay for their own dinners!

Larry Shea, 67-68, felt that prior to his term, the president did all of the work. He instigated the writing of an Operations Manual

... continued

COMMITTEE NEWS

SEMINAR - The ASHRAE Technical Seminar will begin in March of 1982 and we want to make the sessions as relevant and valuable as we can. If we succeed in presenting topics and speakers which are interesting enough to warrant strong attendance by the HVAC industry our chapter will benefit greatly.

YOU can help by taking the time to complete the questionnaire enclosed. Please let us know if the listed topics are of interest to you and be sure to mention others which you would like to be considered.

Grant Bentley
Chairman

ESCMT - The Bay Area Engineering Societies' Committee for Manpower Training, Inc. (ESCMT) has enjoyed 13 years of support from local engineering and architectural societies, including ASHRAE, for its classroom and on-the-job training programs for disadvantaged persons. ESCMT has trained over 400 people in the offices of 100 employers, including 40 trainees in 1980 alone. The On-The-Job (OJT) Program provides trainees with ten months of entry-level work experience in drafting and technology which is supported with in-classroom fundamentals. Those with no previous drafting experience enter the OJT program through the Pre-Vocational Training (PVT) Program which provides a 13-week introduction to drafting and basic mathematics in the classroom. Promising youngsters are acquainted with engineering and architecture as career alternatives through 'Future Tech' activities at two San Francisco middle schools. A Speakers' Bureau, 2 week summer program, field trips, and after school science club are used to introduce 7th and 8th grade students to technical ideas.

ESCMT is a non-profit organization that receives funds from CETA through the San Francisco Mayor's Office of Employment and Training (MOET). Recent cutbacks seriously threaten the ESCMT programs which have helped ...

... the community by providing immediate employment for tax paying citizens. ESCMT's future now depends on private sector businesses and professional societies such as ASHRAE. Suggestions for sources of funding will be most welcome. Please contact DON BRYANT, ASHRAE representative on the ESCMT Board of Directors, or HOWARD RIDEAUX, Executive Director of ESCMT, for further information.

WORKSHOP - ATTENTION MEMBERS! Another school year has started and as you probably know the cost of education has increased anywhere from 10 to 15%. The Golden Gate ASHRAE Workshop provides financial aid to students from northern California who major in Environmental Engineering and Engineering Technology at Cal Poly, San Luis Obispo, and to eligible students majoring in related subjects at City College of San Francisco.

We need YOUR help to sustain the annual Workshop Scholarship. Your donations will be appreciated and are tax deductible.

Contributions can be mailed to:

Bruce Montgomery
Chairman, Scholarship Committee
c/o Montgomery & Roberts
925 Kearney St.
El Cerrito, CA 94530

CODE - The Code Committee for 1981-82 is continuing the review of the San Francisco Building Code, which is undergoing a major revision this year. Last year's committee, chaired by Dick Glumac, did a superb job (hard to follow) and has laid a sound foundation for us to build on.

From time to time, we all have our reservations about certain items in the existing code. Well, we feel this may be our chance to do something about them, so please send us your suggestions ... continued p.5...

COMMITTEE NEWS

... continued from p.4...

for discussions in the committee proceedings. We can then forward our recommendations on the same to the City.

We are also looking for some volunteers for the committee. Won't you help??? Please call HARJINDER S. AJMANI, 546-7160, or BOB PHILLIPS, 362-6065.

TREASURER'S STATEMENT - August 31, 1981

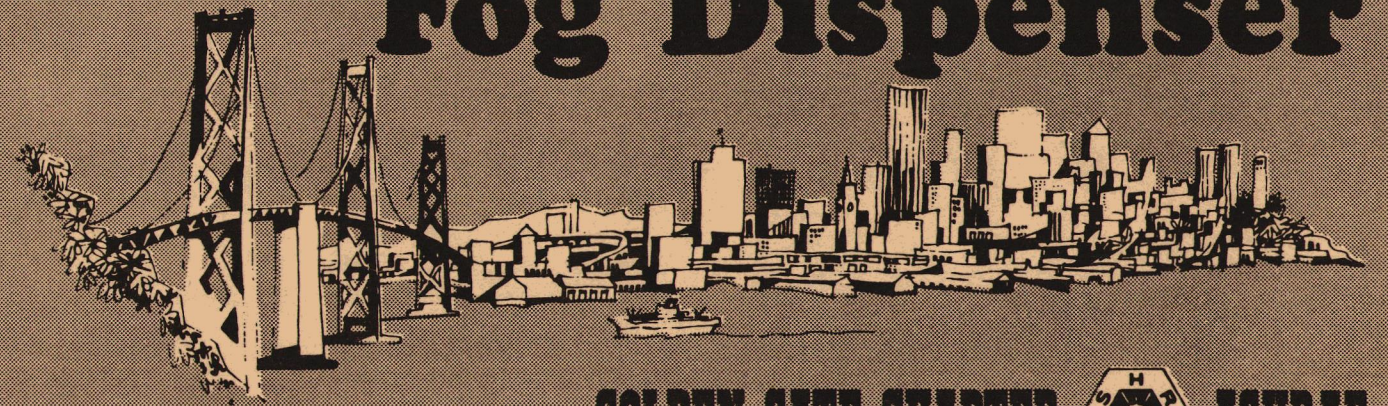
Income.....	\$1102.50
Expenses.....	366.16
Members' Equity....	\$3387.47

RESEARCH / PROMOTION - The following companies and individuals contributed to the ASHRAE Research/Promotion Fund - 1980:

Air Filter Control
Alladin Heating Corp.
Allied Air Products
Bayha, Weir & Finato
Bell Products
E.C. Braun Co.
Cal Hydronics
Charles & Braun
James L. Breese Co.
The Brose Co.
Delucchi Sheet Metal
W.A. DiGiacomo Assoc.
Dinwiddie Construction
Douglass Insulation Co.
Eagleson Engineering
Engineered Air Systems
H.K. Ferguson Co.
Flanders Filters Inc.
Dick H. Fujioka
Garretson-Elmendorf-Zinov
Gayner Engineers
Glumac & Associates
Golden Gate Chapter, ASHRAE
C.S. Hardeman Inc.
Hess, Greiner & Polland
Honeywell
Industrial Power Inc.
JYA Consulting Engineers

Keller & Gannon
Kennedy/Jenks Engineers
Frederick H. Kohloss & Assoc.
R.F. MacDonald Co.
Marina Heating & Air Conditioning
Marinways
MCC Powers
McLaughlin Assoc.
Mirov-Trane Service Agency
Montgomery & Roberts
J.L. Meyers Co.
James A. Nelson Co.
Owens-Corning Fiberglas
Pacific Pumping Company
Pipe Shields Inc.
Rodoni-Becker Co.
Sanford Mechanical Equipment Co.
Syska & Hennessy Inc.
TK & Associates, Inc.
The Trane Co., SF
TEMPCO Equipment Co.
University Mechanical
Vann Engineering
E.B. Ward Co.
Westates Pacific Co.
Western Plumbing & Heating
Wilson, Ihrig & Associates
G.J. Yamas Co.
Yamoto Engineering
York Division, Borg-Warner
Roy Anderson
Bernard Beckius
Earl Bedard, Jr.
Grant Bentley
Donald Bradshaw
S. Van Buskirk
Thomas Conroy
Donald Dickson
Kevin Dowling
Todd Elmgren
Richard Friedman
Richard Gee
G.L. Gendler
Thomas Gilbertson
Dick Glumac
Carl Jordan
John Kniveton
R. Darwin Knowles
Richard Leao
Kenneth Lloyd
Hendrik Mouw
Lewis Pollock
Eugene Valerio
Thomas White

Fog Dispenser



GOLDEN GATE CHAPTER  ASHRAE

VOLUME XXI NO. 2

NOVEMBER 1981

MEETING NOTICE

DATE: November 5, 1981
TIME: 5:30 Social Hour/Smoke
Damper Workshop
6:30 Dinner
LOCATION: ENGINEERS' CLUB
16th Floor
180 Sansome Street
San Francisco

"Are present methods of controlling loads in a building obsolete? You'll be interested in hearing Mr. Ed Wisniewski, P.E., of Energy Control Systems, discuss Power Line Carrier techniques for relaying load demands to a central computer without costly hard-wiring systems."

Tom Campbell, Program Chairman

HONOR ROLL

AIR FILTER / CONTROL

open house at our new location

TUESDAY, NOVEMBER 24, 1981
PRODUCT SHOW / SEMINARS / REFRESHMENTS / WAREHOUSE TOURS
CALL FOR DETAILS
1023 Chestnut St. Redwood City (415) 367-8310

PRESIDENT'S COLUMN

Cal-Poly Student Guests

Want to make a hit with a future air conditioning engineer and get to know one, or more, of our Cal Poly guests (30-35 expected) at our November 5th dinner-meeting?

Due to the large contingent of students expected, our treasurer would appreciate some assistance in treating our guests. We will ask the students to seat themselves with sponsoring members for dinner and the meeting. Students will be introduced by their sponsor. Arrangements for sponsorship will be made at the front reception table, chaired by Tom Judson & Alice Meyer, before the meeting.

Employment Want-Ads

We learned at the last CRC meeting that some Chapters are placing "Help Wanted" ads in their newsletters. Our Board of Directors has decided that we can do likewise. Ads will be placed for \$100 donations to the ASHRAE Research Fund. If you are interested, contact our Secretary, Jim Taylor (786-1335).

Dues

If you haven't already mailed in your Chapter dues (\$15) for the 1981-82 year better do it quickly by November 5th in order to get listed in our Roster. Besides, dues go up after November 5th to \$18.

Richard Friedman

We have been notified that past president Richard Friedman (1969-1970) was voted by the Society's Board of Directors, at their Cincinnati meeting this past June, to be elevated to the membership grade of "Fellow". Congratulations, Dick!

Plan to join in with us at our November 5th dinner-meeting activities!

Bob Phillips
President

- NOTICE -
Be sure to mail your reservation cards for dinner at the Club....

ATTENTION

In case you missed the announcement at the last meeting... there will be a pre-meeting workshop on SF Code requirements for smoke dampers in low rise buildings at 5:30 pm.

COPY DEADLINE

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

Meeting date	Copy deadline
Nov. 5, 1981	Oct. 15, 1981
Dec. 3, 1981	Nov. 11, 1981
Jan. 7, 1982	Dec. 11, 1981
Feb. 4, 1982	Jan. 13, 1982
March 4, 1982	Feb. 10, 1982
April 1, 1982	March 10, 1982
May—Social	April 14, 1982
June 3, 1982	May 12, 1982

Published Monthly, October through June, by the Golden Gate Chapter of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, c/o Duplicating Associates, 370 Brannan Street, San Francisco, CA 94107—Phone 495-4552

1981-82 OFFICERS

Robert Phillips President
Thomas Campbell .. President-Elect
James Taylor Secretary
Kevin Dowling Treasurer

BOARD OF DIRECTORS

James Nemechek
David Rifkin
James Holden

MAIL OR PHONE NEWS TO:

Rich Wells, Editor
925 Kearny Street
El Cerrito, CA 94530
(415) 524-1477

MINUTES FROM LAST MEETING

October 1, 1981
Attendance: 73 Members
19 Guests

1. The meeting was called to order by President Robert Phillips at the San Francisco Engineers Club at 7:20 P.M.. Self-Introduction of members and guests followed.

2. Minutes of the June 4, 1981 year end meeting approved as published in the Fog Dispenser.

3. Past President Richard Charles reported on the temperature data book. He again requested suggestions for a more imaginative name. The goal for publication is January 1982.

4. Board Member Dave Rifkin reported on the combined ASPE/ASHRAE table top show. The event is scheduled for March 10th and letters are going out to exhibitors this month. Committee member Robert Wistort requested help with the mailing lists.

5. Fog Dispenser Editor Richard Wells requested companies to volunteer for Fog Dispenser Honor Roll. Deadline for November Fog Dispenser is October 15. Rich is going on vacation.

6. The delay in receiving the hand-book of fundamentals was questioned by Richard Gee. Dick Charles explained the loss of key personnel in the Atlanta move and related his information that the manual is at the printers.

7. Past President Richard Glumac announced a November premeeting workshop on the subject of smoke dampers in low rise building. This is part of the San Francisco Code revision. The meeting is scheduled for 5:30 to 6:30.

8. Robert Braun reported on the activities of the Energy Committee. They are working on revisions to Title 24 and request help for those interested. Those interested may contact Bob Braun or Doug Daniels.

9. At 8:05 Mike Lynn held the raffle for the scholarship fund.

10. President Elect Tom Campbell introduced the speakers for the evening, John Shade of the California Energy Commission, Zulfikar Cumali of the Consultants Computation Bureau and Karl Guttman of Guttman & MacRitchie. The speakers presented various views on the proposed revised energy standards for Nonresidential Buildings. The excellent presentations were followed by a lively question and answer period.

11. The meeting was adjourned at 9:30 by President Elect Tom Campbell.

ITEM - ITEM - ITEM - ITEM - ITEM

The following message was received from the SF Department of Public Works:

"Please do not use the revised Residential Design Manual Tables 7-3 and 7-5 which were transmitted to you by letter dated July 15, 1981. We have just learned that the Energy Commission chose to permit the public to comment prior to publishing the tables for general use. Use the data in the published Design Manual until the State actually releases revisions.

If you have already proceeded with your design based upon the revised Tables we will, of course, accept designs on this basis."

ASHRAE
GOLDEN GATE CHAPTER

FINANCIAL STATEMENT
AS OF
OCTOBER 31, 1981

ASSETS

110	Checking Account	\$2,789.15
120	Savings Account	156.24
	TOTAL ASSETS	<u>\$2,945.39</u>

LIABILITIES

220	Research - National Fund	\$ 0.00
230	Cal Poly Workshop Fund	0.00
	TOTAL LIABILITIES	<u>\$ 0.00</u>

MEMBER'S EQUITY

299	General Fund	<u>\$2,945.39</u>
	TOTAL LIABILITIES & EQUITY	<u>\$2,945.39</u>

HELP NEEDED

The joint ASHRAE/ASPE Committee needs help in putting together a mailing list. Anyone who owns an Apple computer and can donate time for typing please call Bob Wistort at (415) 442-6300 days, or (415) 523-6651 evenings. Help is needed to input names & addresses to the computer for mailing announcements to interested parties. We will furnish discs, program & documentation.

Thanks,

Bob Wistort

** NOTICE **

Due to escalating bank charges, the Engineers Club of San Francisco will be charging all Engineering Societies \$5.00 for each check returned by their bank that has been accepted in payment at dinner meetings.

The Engineers Club regrets this action but bad checks are becoming more frequent.

COMMITTEE NEWS

Be sure to circle the following dates on your 1982 calendar: March 16, 23, 30, and April 6. On these four Tuesday evenings you can increase your knowledge and continue the educational development of your employees by attending the 1982 ASHRAE Technical Seminars; to be held in the PG & E Auditorium located at 245 Market St. (Beale St. entrance), San Francisco. Starting time is scheduled for 6:30 PM.

The technical committee co-chairmen Grant Bentley and Phil Russo want to thank the membership for their help in selecting seminar topics of interest and relevancy. Based on our questionnaire, the 1982 Seminar will cover the following topics:
1) Economizer Cycle: Air-side/Wet-side
2) Design and Service of Variable Air Volume Systems
3) Seismic Update
4) Life Cycle Costing/Value Engineering.

DON'T FORGET

TO SEND IN YOUR DINNER RESERVATION CARD



VOLUME XXI NO. 3

DECEMBER 1981

MEETING NOTICE

DATE: December 3, 1981

TIME: 5:30 Social Hour
6:30 Dinner

LOCATION: ENGINEERS CLUB
16th Floor
180 Sansome Street
San Francisco

PROGRAM:

ENERGY CONSERVATION FOLLOW-UP

By popular demand we have asked last December's award-winning panelists to return and give us an update on how some of their ideas have panned-out a year later.

Be sure to attend to hear:

- Karl Jordan - Obtaining a S.F. Building Permit for designs using Title 24 Energy Budget
- Tom Gilbertson - Water-side Economizer systems They really work
- Frank Mahew - Macy's gets positive results, using microcomputers to control energy consumption
- Tom Simonson - A different approach to energy conservation

Tom Campbell, Program Chairman

HONOR ROLL

Carrier Machinery & Systems Division
7755 Pardee Lane - Suite "G"
Oakland, CA 94623
(415) 430-0434

Thomas C. Kohl	James A. Hall
Jeffrey B. Kerl	Phillip M. Williams
David J. Holm	Kenneth J. Horsfall
Kevin N. Davey	

PRESIDENT'S COLUMN

November General Meeting

We were honored to have so many members and guests attend our dinner-meeting to hear the program speaker describe the utilization of building electrical systems for conduction of on-off signals to monitor and control mechanical equipment.

The visit by the large contingent of Cal Poly students, both men and women, indicates the growing recognition by college students of the importance of the heating and air conditioning field as a profession with an excellent future.

We are very grateful to the many Chapter members including Dick Friedman, Tom Judson, Jim Taylor, Dave Rifkin, John Busch, and Jack Zarour who generously sponsored a Cal Poly student, and to Glumac & Associates who sponsored five students. The Chapter Treasury also wishes to express its thanks!

I was one of the many who attended our Code Committee's pre-meeting workshop to discuss the question of what our Chapter's position should be with respect to recommendations for or against including smoke damper requirements in the San Francisco building codes. I wish to commend Harry Ajmani, the Chairman of our Code Committee, and the enthusiastic members of that committee. I believe that the work of this committee adds much stature to our chapter and the Society, in the eyes of the public. The consensus of the pre-meeting workshop attendees was that the requirement to provide smoke dampers in

low rise buildings could not be justified at this time.

Board of Directors Meeting

At the November Board of Directors meeting it was decided not to hold a "social" (dinner-dance) event this year. Having attended some of these in past years, I know that they are very enjoyable; however, they are also very expensive and have not always been well attended. The Chapter has had to subsidize this event in the past and there has been some justified criticism of this expense.

It was decided further that we should have a field trip again this year for our May 1982 meeting. Program Chairman Tom Campbell is attempting to line up a tour through the Moscone Center, the Louise M. Davies Symphony Hall, or some equally interesting project, with dinner at some nearby restaurant.

Chapter Projects

Coming along nicely, thanks to the efforts of our hardworking committee members are our big Chapter projects: Research/Promotion fund raiser chaired this year by Sherman Brown; Table-Top's show planned for next spring at Fort Mason (co-sponsored with ASPE) with our efforts being headed up by Dave Rifkin; Technical Seminar planned for this coming spring being co-chaired by Grant Bentley and Phil Russo; and the new temperature data book being sponsored jointly with the Southern California Chapter of ASHRAE. Dick Charles has been working with the Southern California Chapter and the professionals putting the data together to hopefully have the publication data early in 1982. ...cont'd p. 3...

PRESIDENT'S COLUMN cont'd

We're looking forward to one of our most interesting panel-type meeting programs on December 3rd. How about joining us and bring a guest!

Bob Phillips
President

* * * * *

ENGINEERS' CLUB NIGHTMARE IS OUR BABY!

Put yourself in the place of the cook at the Engineers Club last November 5th for the Golden Gate Chapter ASHRAE's dinner-meeting...

Less than 90 members and guests had indicated by either post-card or phone that they would be present for the dinner, when actually about 140 hungry diners showed up all set for a big meal!

Due to the large number of Cal-Poly student guests, the Engineers Club did not realize until people started sitting down, the severity of their problem. At first, it looked as though we would have to ask people to leave because there was insufficient food to go around. The evening nearly turned out to be a real catastrophe and was only saved when the Engineers Club cut portions and somehow scraped up enough food so that everyone at least had something to eat.

The Engineers Club has intimated that we will be charged a surcharge on unreserved dinners.

Needless to say, we cannot let this happen again! So please, mail in your reservation card or phone the Engineers Club and help us avoid another crisis.

Thanks,

Bob Phillips
President

* * * * *

MINUTES FROM LAST MEETING

November 5, 1981

Attendance: 80 Members 33 Cal Poly
25 Guests Students

- 1. The meeting was called to order by President Robert Phillips at the San Francisco Engineers Club at 7:15 pm. Self-introduction of members and guests followed.
- 2. President Phillips apologized to the Engineers' Club for their having to serve extra people. Many reservation cards were not returned to the Club.
- 3. The minutes of the October 1, 1981, meeting were approved as published in the Fog Dispenser.
- 4. Board Member Dave Rifkin reported on the Table-Top show scheduled for March 10, 1982. All facility reservations have been made and the exhibitors' announcements are being mailed this month.
- 5. Past President Dick Friedman presented a check for \$1,000 to Stan Shana of Cal Poly for the workshop fund.
- 6. President Phillips thanked the members who attended the pre-meeting workshop on the S.F. Code revisions.
- 7. Past President Richard Charles reported no new progress on the Temperature Data Book. His efforts have been directed to the Title 24 revisions. The State is proposing radical changes but they have been tardy in asking for outside review.
- 8. After a break, Dick Hughes conducted the raffle.
- 9. President-Elect Tom Campbell introduced the speaker for the evening, Edward M. Wisniewski of Energy Control Systems, Inc., Hayward, California. The discussion of "power line carrier" control techniques covered the many methods currently being used.
- 10. The meeting was adjourned at 9:20 pm. by President-Elect Tom Campbell.

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1981-82 OFFICERS
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Thomas Campbell .. President-Elect
James Taylor..... Secretary
Kevin Dowling..... Treasurer

BOARD OF DIRECTORS
James Nemechek
David Rifkin
James Holden

MAIL OR PHONE NEWS TO:

Rich Wells, Editor
925 Kearny Street
El Cerrito, CA 94530
(415) 524-1477

MINUTES OF CODE COMMITTEE - MEETING # 11
cont'd . . .

b) Fire dampers

We need general section like Sec. 1006 of UMC

Inquire from Mr. F. Lew what will be required in Life Safety Smoke Control under Sec. 1806.

Next meeting shall be held on Wednesday, May 27, 1981 at 12:00 Noon. Mr. Franklin Lew is invited plus a representative of SFFD.

The annual tennis tournament was held on April 24, 1981 at the San Francisco Tennis Club. Twenty-six members and guests enjoyed a fine afternoon of tennis. The winners were:

A Group

- 1) Howard Friesen
- 2) Bob Roos

B Group

- 1) Roy Anderson
- 2) Gerry Yaffe

Also, the Chapter thanks Norman S. Wright Equipment Co., Inc. for the generous donation of \$130.28 to make up the difference between expenses and income.

PROGRAM OPINION POLL

One of the most important parts of the monthly Chapter meeting is the after-dinner program. The Program Chairman needs your help in rating the various types of programs so that future meetins will provide the most membership desired activity. Please take a moment to fill in the enclosed questionarie, and mail it back.

Thank you. Bob Phillips, Program Chairman

BECOME A PART OF THE ACTION

The successful operation of our Chapter depends greatly upon the combined efforts of our officers and especially the many members who are willing to give some of their time to serve on a committee.

Being on a committee has many benefits including technical benefits resulting from meetings and discussions with other members of our profession and the many professional friendships which follow.

Won't you check-off your choice of committee(s) which you wish to be a part of for this coming year on the enclosed questionnaire and mail it in. Help our chapter and help yourself in the process.

- ATTENTION CALORIE COUNTERS -

A recent report pointed out that physical fitness cannot be attained by dieting alone and that strenuous exercise is an important yet often overlooked, ingredient in any fitness program. The following is a list of common calorie-burning activities and the calories per hour consumed:

- Beating around the bush..... 75
- Jogging your memory.....125
- Climbing the walls.....100
- Swallowing your pride..... 50
- Passing the buck..... 25
- Grasping at straws..... 75
- Tooting your own horn..... 2
- Throwing your weight around..... 50-300
(Depending on your weight)
- Dragging your heels.....100
- Pushing your luck.....250
- Spinning your wheels.....175
- Making mountains of molehills.....500
- Flying off the handle.....225
- Hitting the nail on the head..... 50
- Wading through paperwork..... 30
- Bending over backwards..... 7
- Beating your head against a wall..... 15
- Climbing the ladder of success..... 75
- Running around in circles..... 35



VOLUME XX NO. 9

JUNE 1981

MEETING NOTICE

DATE: JUNE 4, 1981

TIME: 5:30 Social Hour
6:30 Dinner

LOCATION: ENGINEERS' CLUB
16th Floor
180 Sansome Street
San Francisco

PROGRAM: "PAST PRESIDENTS' NIGHT", awards of honor for past year's accomplishments and annual business meeting

At this meeting we have a chance to renew old friendships with past chapter Presidents and their wives, and to witness our 1980-1981 President Jim Holden's "Swan Song".

Should be a most enjoyable evening - - - one you won't want to miss!!!

Bob Phillips, Program Chairman

HONOR ROLL

MARINA HEATING & A.C.

23188 Foley Street
Hayward, CA 94545
(415) 786-3500

Bob Hussey
Dave Rifkin

DON'T PUT OFF TILL TOMORROW WHAT YOU CAN DO TODAY... call Dave Rifkin, at Marina Heating & AC, 786-3500, to reserve your place on the Honor Roll mailing list.

***** NOTICE *****

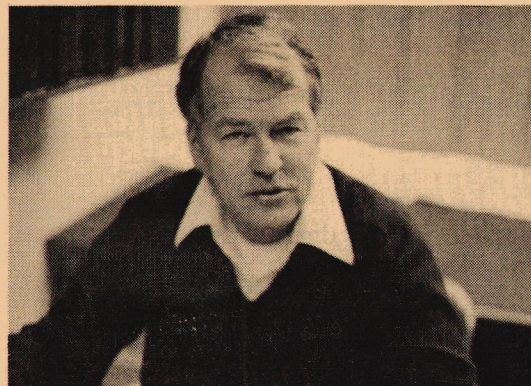
LICENSE REVIEWS TO START IN JULY

The Professional Engineering Institute has announced that its review courses for the October 31, 1981 Engineering-In-Training and P.E. examinations for Mechanical, Electrical and Chemical engineers will begin the last week of July. For a free descriptive course brochure, call (415) 593-9731.

The deadline for applying to take the P.E. exam is July 17. The deadline for the E-I-T exam is August 28. For examination applications, call (415) 557-0966.

Corner

President's



As every past president has said in his last column while in office, "The year went quicker than ever", etc. This still holds true.

Our June meeting features a business meeting and our annual honors, awards, and past presidents' night. With that, the 1980-81 chapter year will be complete and we will rack up another one.

I am looking forward to the next chapter year with Bob Phillips at the wheel. Bob, whom I have known through the five years we have been associated on the board, will do a journeyman job. I can relax and enjoy ASHRAE with fewer responsibilities.

I have always felt that I owed a lot to ASHRAE -- that's why I accepted when I was tapped on the shoulder to become a director. Through the eleven years that I have been a member, I have been able to meet most of the people in the industry.

These associations have been rewarding to me, both as an individual and professional. All in all, it has been a rewarding experience, as a member and as an officer.

There have been many members of our chapter who have done an outstanding job this year. Some of them will be acknowledged in the presentation of awards in June. Personally, I would like to thank all who have pitched in and helped out.

Next year should be a banner year financially with the added income from our unnamed (as yet) temperature data guide and our first ever table top night. I'm glad I'll be around.

Thanks again everyone!

REPORT OF CRC-81

The annual ASHRAE Chapter's Regional Conference (CRC) was held on May 6-9 at the Marriott Hotel, Great America Parkway, Santa Clara. The San Jose Chapter was this year's host. Bob Phillips and Tom Campbell represented Golden Gate Chapter. Other Region X chapters attending were Central Arizona, Hawaii, Northern Nevada, Orange Empire, Sacramento Valley, San Diego, San Joaquin, Southern California, Southern Nevada, and Tucson.

Wednesday's events included registration, golf tournament, tennis tournament, and the welcome party.

The annual business meeting took place on Thursday morning and included remarks by Society Vice President Mr. Clinton Phillips and Society President-Elect Mr. Jack Chaddock. Also there was Regional Chairman Wally Donley's report, Chapter reports of this past year's activities and accomplishments, Regional Committee reports, Presidential Award of Excellence nomination, Temperature Data Book report, and motions and resolutions. Following the President's lunch, which featured a talk by Society President-Elect Jack Chaddock, attendees broke into groups to listen to programs put on by Regional Vice Chairmen for Membership, Research Promotion, Education, and Energy Management (Dick Charles - Vice Chairman).

On Friday, four technical seminars were put on covering "Architectural Considerations for the Design of Semiconductor Manufacturing Facilities", "Vibration and Its Effect on Electronic Manufacturing Industry", "Pollution Control Considerations for Semiconductor Manufacturing Facilities", and "Comparison of Particulate Levels at Various Semiconductor Manufacturing Facilities." The dinner-dance was held on Friday evening.

Saturday's program consisted of further consideration of motions and resolutions proposed by the Chapter, and the Executive Session in which nominations were received for Fellow Awards and Regional and Society Officers.

CODE COMMITTEE MINUTES - MEETING #11

May 19, 1981

PRESENT: H. Ajmani
R. Braun
J. Breese
R. Voelz
D. Glumac

ABSENT: T. Campbell

SUBJECT: SFBC Sec. 5130.I, Fire and Smoke Dampers

1. Members discussed the S.F. Building Code Sec. 5130.I Smoke and Fire Dampers in a general context.

2. Committee concluded that the smoke dampers are required and necessary for control of smoke in structures.

3. However, the committee feels that Sec. 5130.I of SFBC does not accomplish the intent of the basic premise.

4. It was also agreed that smoke dampers are required at air openings to and from vertical shafts.

5. Smoke detectors should be located at return air openings to operate the smoke dampers.

6. Before proceeding with the precise code requirements for smoke and fire dampers, the committee felt that a general discussion should take place with the BBI and possibly SFFD.

Such a discussion should also include the intent of SFBC Sec 1897 - High Rise Life Safety Code and how it relates to Article 51.

Following major definitions should be established:

- a) Smoke dampers
- general paragraph where required
- how to indicate
- how to operate
- approvals, etc.

. . .cont'd page 4

COPY DEADLINE

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

Meeting date Copy deadline

June 4, 1981 May 14, 1981

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Robert Phillips President-Elect
Thomas Campbell Secretary
James G. Taylor, Treasurer

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James G. Nemecheck

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MINUTES FROM LAST MEETING

cont'd...

Coordinating with Los Angeles is going well and the two chapters will make a presentation at CRC.

10. Grant Bentley, Seminar Co-Chairman reported 160 registrations for the four week event. Grant will be the Chairman for 1982 and is looking for another Co-Chairman.

11. The raffle was conducted by Rich Leao. Prizes were donated by Richard Gee, Dick and Jody Hughes, and Jim Holden.

12. Bob Phillips introduced the two speakers for the evening -- Dr. Edward Murphy, San Francisco General, Occupational Health Clinic, and Don Cummins, Vice-President, Purafil Corporation. Dr. Murphy reported on their studies of the respiratory problems experienced in the new Oakland High School buildings.

Mr. Cummins reported on the rewriting of ASHRAE Standard 62-73 Ventilation Standards.

13. There being no further business, the meeting was adjourned at 9:32 PM.

MEETING ATTENDANCE - April 2, 1981

MEMBERS:

Dan Vandament	Pete Filios
Max Wolfe	Gene Valerio
Tom White	Dan Knowles
Dick Hughes	Mike Bekedam
Gus Gendler	Dick Charles
Steven Taylor	John Brose
Kaz Inouye	M. A. Rountree
Jim Nemechek	Jim Holden
Bob Phillips	Rich Wells
Tom Gilbertson	Hendrik Mouw
Dick Fujioka	Sam Yamoto
Dave Rifkin	Ken Lloyd
Bert Bomersine	Richard Leao
Rick Paillon	Walt Schneider
Richard Gee	Jim Taylor
Sharon Morse	Mike Lynch
Richard Hamer	Arnold Bletnitsky

MEMBERS:

Roy Anderson	Carl Jordan
Todd Elmgren	Lew Pollack
Sherry Calloutte	Ward Clark
Chuck McLaughlin	Stanley Eng
Scott Tripp	Kim Storm
Don Bradshaw	Jack Kniveton
Gerald Kasin	Karl Guttmann

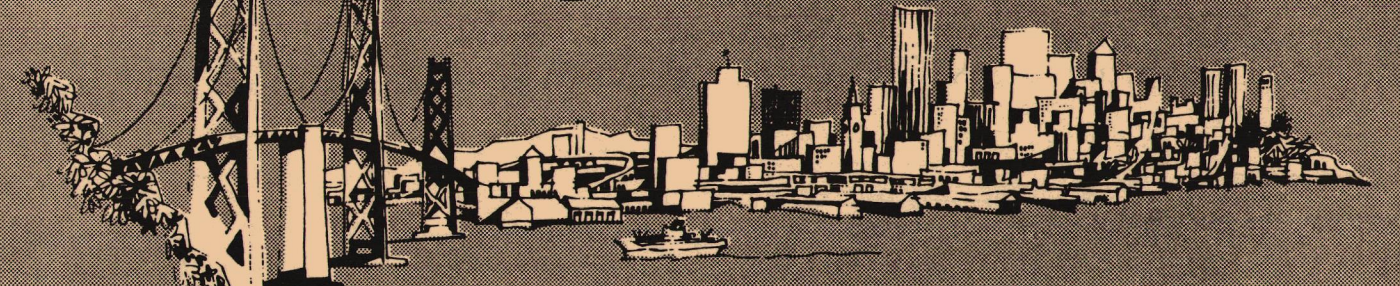
GUESTS:

Mrs. Vandament	Miki Inouye
Amanda Filios	Marianne Rountree
Betty Wolfe	Kitty Nemechek
Pat Valerio	Ricky Holden
Adele White	Pat Phillips
Audrey Knowles	Sharon Wells
Jody Hughes	Juanita Gilbertson
Alma Bekedam	Mildred Mouw
Betty Gendler	Eric Hovakimian
Van Charles	Erik Lo
Sheila Taylor	Juanita Opstein
Dorothy Brose	Glenna Mote
Don Cummins	Karol Cummins

LAVISKY'S OBSERVATION

Education is what you get from reading the small print. Experience you get from not reading it!

Fog Dispenser



GOLDEN GATE CHAPTER  **ASHRAE**

VOLUME XX NO. 8

MAY 1981

MEETING NOTICE

DATE: MAY 14, 1981

TIME: 6:15 - 7:30 DINNER
7:30 TOUR

LOCATION: Meet for dinner at La Fuente Mexican Restaurant; Upper Level, Embarcadero #2, SF.

We will be in the rear of the restaurant - order from the menu - NO RESERVATIONS REQUIRED.

PROGRAM: FIELD TRIP - Tour of the Embarcadero #4 Office Bldg. (courtesy of Glumac & Assoc.)

HONOR ROLL

ARANOVSKY & ASSOCIATES

George N. Aranovsky
115 Fairview Drive
Daly City, CA 94015
(415) 755-8464

YES, there is space still available on the Honor Roll mailing list. Please contact Dave Rifkin, at Marina Heating & AC, 786-3500 for more information.

I T E M****I T E M****I T E M****I T E M

To date, this year's monthly raffle has contributed \$320 to the Chapter's Scholarship Fund!

Our many thanks to Richard Gee, Dick and Jody Hughes, and Jim Holden for donating the raffle gifts for April.

Raffle prize donations (TAX DEDUCTIBLE!) greatly help the scholarship fund grow.

Call Dick or Jody Hughes at 391-6579 to let them know of your gift for the raffle.

I T E M****I T E M****I T E M****I T E M

**** N O T I C E ****

DON'T FORGET THE CRC-81 DINNER/DANCE ON MAY 8, AT THE GREAT AMERICA MARRIOTT HOTEL, GREAT AMERICA PARKWAY, SANTA CLARA.

Cocktails: 6:30 PM
Dinner: 8:30
Dancing: 9:00 - ?

\$30.00 per Person
Make checks for reservations payable to CRC-81 and forward to Bob Phillips, C/O 4176 Donald Drive, Palo Alto, CA 94306



Corner

President's



Region X CRC time is right around the corner. Delegate Bob Phillips and alternate Delegate Tom Campbell are busy getting together their material (I hope) to present on behalf of Golden Gate Chapter. I would like to make a plea that everyone possible attend at Great America Marriott, in Santa Clara, on May 6-7-8-9. The first day is strictly social... come enjoy yourself, meet old friends, find out what's going on at ASHRAE, and get some technical information to boot!

During their term in office, every president seems to make a mark of some kind on the chapter. Most of these marks are good. There is one thing I would like to do as president of our chapter and that is to create a continuity to our committees. I think it should become traditional for most committees to have a chairman and a co-chairman. The person who is chairman this year picks (or accepts a volunteer)

a co-chairman to learn the position and then become the chairman for the following year. On some of our larger committees, such as Energy, Solar, and Code, the process may take a little longer. On some others, such as Fog Dispenser, Roster, and Raffle, two people are all that are needed, but by having a co-chairman, the year the chairman leaves the committee the co-chairman is trained and ready to take over, effecting the continuity necessary to do a good job. We have made a good start in this direction this year and for the chairmen who do not have co-chairmen, now is the time to get them.

Along committee lines we have had some outstanding performances this year. Two letters were received, one from Richard Perry, former Region X Director and now society Vice President, and the other from James Hill, Chairman of ASHRAE Standard Project Committee 95P, concerning the work done by
...cont'd p.3...

PRESIDENT'S CORNER

cont'd...

Glenn Claycomb and the Solar Energy Committee. Of the 42 suggestions made by our committee regarding the 1980 Draft of ASHRAE Standard 95, 41 were accepted by the ASHRAE Standard Project Committee and are being incorporated in a final version of the Standard. This certainly is something for Golden Gate Chapter to be proud of.

CODE COMMITTEE MINUTES - MEETING #10

April 7, 1981

PRESENT: Tom Campbell
Jim Breese
Bob Voelz
Dick Glumac

ABSENT: Mat Chickhale
Bob Braun
H. Ajmani

Re: Review of Chapter 51 - Incinerators

Sec. 5128A of SF Bldg Code refers to table 37-B and the BAAPCB. Table 37-B is included in UBC Chapter 37 so it is covered, but reference to BAAPCB is not. If, in fact, BAAPCB has more stringent requirements than EPA (State or Federal) it should be mentioned as an amendment.

Sec. 5128B; Tables 51A and 51B are contained in UMC Chapter 5, which are very similar.

Sec. 5128D contains requirements for 2-hour and 3-hour construction features but UMC requires only 2-hour construction. We recommend to stay with the UMC. Also, UMC distinguishes between incinerators above or below 250 lb capacity. We feel this is more desirable so, therefore, UMC is recommended again.

Chapter 19 - UMC, Miscellaneous Heat Producing Appliances, is recommended for adoption since the SF Bldg Code is very limited when compared to UMC-19. The only item lacking in UMC is requirement that "commercial clothes dryers shall have lint collectors" which we feel is a desirable feature, so we recommend that it be included as an amendment.

MINUTES FROM LAST MEETING

April 2, 1981

Attendance: 48 members
26 guests

1. The meeting was called to order at 7:27 PM by President James Holden at the Engineers' Club, San Francisco.
2. Minutes of the March meeting were approved as published in the Fog Dispenser.
3. Gene Valerio presented the results of the Teller's Committee for the election of officers for 1981-1982:

President-elect; Tom Campbell, 136 votes
Secretary; James Taylor, 138 votes
Treasurer; Kevin Dowling, 138 votes
Board Members; Dave Rifkin, 127 votes
James Holden, 119 votes

4. Pete Filios gave a report on the Golf Day to be held April 24, at the Meadow Club in Fairfax. This will be a combined event with the Plumbing & Heating Contractors Association.
5. Jack Kniveton reported that the Tennis Tournament will also be held on April 24th. The event will be at the San Francisco Tennis Club, starting at 4 PM. There was discussion from the floor on having both the Golf and Tennis events the same day.
6. Carl Jordan, Research Committee Chairman, reported the donations are progressing very well. To date \$4,785 has been collected, mostly from companies. Only 20 individuals have donated and a better response is hoped for.
7. Jim Holden reported on the upcoming Chapters Regional Conference (CRC) in San Jose. All members are invited to attend. Bob Phillips reminded everyone that this year's social will be combined with the CRC Social, May 8.
8. Chuck McLaughlin invited the tennis types to join in the CRC Tennis Tournament, May 6th, at the San Jose Marriott Hotel.
9. Dick Charles, Jim Holden, and Jim Taylor reported on the revised Temperature Data Book. The publication is up to 110 pages and is scheduled for printing in September.

COPY DEADLINE

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

Meeting date	Copy deadline
May—Social	April 16, 1981
June 4, 1981	May 14, 1981

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James G. Nemecheck

MAIL OR PHONE NEWS TO:

Rich Wells, *Editor*
925 Kearny Street
El Cerrito, CA 94530
(415) 524-1477

MEETING ATTENDANCE - March 5, 1981

MEMBERS:

- Bob Phillips
- Kevin Dowling
- Tom Campbell
- Richard Mayer
- Jim Holden
- Tom Gilbertson
- James Taylor
- Frank Mayhew
- Bob Judd
- Bruce Montgomery
- Rich Wells
- Pete Knezevich
- Bob Wistort
- Gino Calacchia
- Glenn Cheek
- David Rifkin
- Roy G. Anderson
- Glenn Claycomb
- Sam Yee
- Kenneth Yu
- Gordon Goodding
- Gene Valerio
- Jack Zarour
- Don Bryant
- Clyde Wilson-Reid
- Dart Rinefort
- Dick Charles
- Steve Taylor
- Rich Leao
- Tom Conroy
- Jim Van Buskirk
- Willian Wong
- Hank Shastany
- Henrik J. Mouw
- Dick Hughes
- Stanley Eng
- Scott Tripp
- Walt Schneider
- Art Gamble
- Sam Yamoto
- Mike Rubio
- Duane Hanson
- Tom White
- Lyle Schuelke
- Pete Filios
- Max Wolfe
- Jim Hall
- Dennis Stevens
- Fred Brunk
- Dick M. Glumac
- Carl H. Jordan
- Larry Shea
- Richard E. Gee
- Jack Knifeton
- Pual T. Jay
- Michael P. Lynch
- Robert Voelz
- Dick Friedman
- Grant Bentley

GUESTS:

- Paula Rosput
- John M. Lopez
- Kenneth D. Young
- Gary Rugel
- Grank Macaluso
- Murray Kobrin
- Bryan B. Brauer
- Dave Holm
- Billy Gee
- Dennis Federici
- Phill Brezman
- Joe C. Applewhite

***** NOTICE *****

ASHRAE RESEARCH

Remember the importance of ASHRAE research to each of us. To date, contributions from companies have been great -- over \$4,000!!! But, very few individual members have contributed. This announcement is addressed to you individuals, and to the notable exceptions among companies that have not yet contributed. Make your checks payable to "ASHRAE Research" and mail to:

Carl H. Jordan
 Skidmore, Owings & Merrill
 62 First Street
 San Francisco, California 94105

Thanks for your help.



VOLUME XX NO. 7

APRIL 1981

MEETING NOTICE

- DATE: APRIL 2, 1981
- TIME: 5:30 Social Hour
6:30 Dinner
- LOCATION: ENGINEERS' CLUB
16th Floor
180 Sansome Street
San Francisco
- PROGRAM: "RESPIRATORY PROBLEMS
ASSOCIATED WITH THE
INDOOR ENVIRONMENT

Wives (and husbands) of members are cordially invited to attend our April 2nd dinner-meeting.

We are fortunate to have two distinguished speakers: Dr. Molly Coye, medical investigative officer, U.S. Public Health Services, National Institute for Occupational Safety and Health, and Mr. Don Cummins, member ASHRAE Technical subcommittee which has just completed rewriting ASHRAE Standard 62-73 R "Ventilation for Acceptable Indoor Air Quality."

HONOR ROLL

THE BROSE CO.
 P.O. Box 2867
 5353 College Ave.
 Oakland, CA 94618
 (415) 654-8311

Please contact Dave Rifkin, at Marina Heating & AC, 786-3500, if your organization is not already on the Honor Roll mailing list.

***** NOTICE *****

May programs planned include a Dinner-Dance in San Jose at the CRC (Chapter's Regional Committee) Conference, on Friday evening May 8th and a field-trip (dinner) meeting on Thursday evening, May 14th, which will be a tour through Embarcadero Center IV. Save both of these dates. Details and reservations information will be forthcoming.

Bob Phillips, Program Chairman

MINUTES FROM LAST MEETING

March 5, 1981

Attendance: 59 members
12 guests

1. President James Holden called the meeting to order at 7:30 p.m. at the Engineers' Club in San Francisco.
2. Self-introduction of members and guests followed. Grant Bentley took this opportunity to remind the members that the Annual Seminar is in progress and urged their attendance at the three remaining sessions.
3. The minutes of the February 5th meeting, as published in the Fog Dispenser, were approved.
4. Dick Glumac gave the report of the nominating committee. Those nominated were:

Robert Phillips	President
Thomas Campbell	President-elect
Jim Taylor	Secretary
Kevin Dowling	Treasurer
Dave Rifkin	Board of Governors

Jim Nemechek has one year remaining of his term on the Board. James Holden will automatically become Past President and a member of the Board.
5. A report on the status of the Temperature Data Book was presented by Dick Charles. The content of the Temperature Data Book has been expanded greatly from the original concept with a resultant increase in production costs. It is now contemplated that it will sell

for \$17.00 per copy with a pre-subscription price to members of \$11.00. Sales agreements with the Los Angeles Chapter are being finalized. It was announced that the California Energy Commission would take appropriate steps to give the new document official status in their regulations for residential and nonresidential energy conservation.

6. President Holden congratulated Glenn Claycomb on the fine work of his Solar Energy Committee. Of 42 suggestions submitted by the Committee relative to ASHRAE Standard 95, 41 were accepted. A letter of commendation from Dr. James Hill, Chairman of ASHRAE 95 Committee, and Vice-President Richard Perry is on its way.

7. Carl Jordan urged all members to contribute to the Research Fund. At this time contributions from companies are up, but the individuals are falling behind.

8. Pete Filios announced that the Annual Golf Tournament will be held April 24th at the Meadow Club in Fairfax, California, in conjunction with the Plumbing and Heating Club of Northern California. Interested golfers are urged to make up their foursomes and get their reservations in. More details will be in the April Fog Dispenser.

9. Jack Kniveton reminded the members that the Annual Tennis Tournament will be held at the San Francisco Tennis Club on April 24th.

10. Dart Rinefort spoke briefly on the

MINUTES FROM LAST MEETING

March 5, 1981 (continued)

National Energy Awards Program sponsored by the Society. Details were contained in a flyer which was mailed with the March Fog Dispenser.

11. Dick Gee conducted the Scholarship Raffle. Our featured speaker, Paula Rosput, drew the lucky numbers and the beneficiaries were Messrs. Glumac, Bryant, and Gilbertson.

12. Bob Phillips introduced our featured speaker, Ms. Paula Rosput, who is supervisor of Rate Evaluation for PG&E. Ms. Rosput has degrees from Wellesley College and has attended the University of California Graduate School of Business Administration. She is author of several papers which have been presented at technical meetings.

Ms. Rosput's talk dealt with the current high costs of gas and electricity. She first described the current mix of an energy availability, then gave ideas on how to contain the increase, and lastly, projections on what the future had in store.

PG&E is the largest public utility in the United States. Electricity is derived, 38% from hydro, 7% from nuclear, and 55% from oil, gas, geothermal, and other miscellaneous sources. Approximately half the hydropower is purchased from the Northwest but this source is drying up. Nuclear power is purchased from SMUD. But available energy from Rancho Seco plant is decreasing as SMUD's demand consumes a larger percentage of their generating capacity. Rancho Seco, if it were on-line, would amount to 15% of PG&E's electric demand and would save approximately 27 million barrels of oil per year. The savings in fuel costs would more than offset the increase cost to the rate payers when Diablo Canyon is put on-line.

PG&E secures approximately 17% of its gas from producers in California at an average price of \$2.50 per thousand cubic

feet. Canadian gas which amounted to 45% of the usage last year is being reduced to 38% as the Canadian gas prices have increased from 25¢ per mcf to \$4.97. The balance of PG&E's gas is purchased from El Paso natural gas at a price ranging from between \$2.50 and \$3.00 per mcf.

In an attempt to keep prices as low as possible PG&E is exploring many alternatives. Among these are the possibility of coal generation. Diablo Canyon nuclear plant will be a major cost saver when it is brought on-line. Utilities attempt to shift the demand through the implementation of "Time of Use Rates". Special rate structures have been developed for customers using more than 500 kw to encourage this shift.

Conservation is the most straight forward means of reducing energy demand. PG&E is funding any conservation program which can be shown to be cost effective. This means that the savings generated by the program are greater than the expenditures for the next most costly means of providing energy.

Ms. Rosput indicated that the cost of gas is projected to rise 9% in 1982 and an additional 13% in 1983. Electric rates will increase 44% in 1982 and by 1983 will be 50% higher than today.

Unfortunately, she was not able to tell us that the worst was over; energy prices will continue to rise. She urged that conservation measures be the first order of priority as, at this time, the full potential for conservation has not been reached.

13. Bob Phillips announced that the April 2nd meeting will be Ladies' Night. The speaker will be Dr. Molly Coye from the U.S. Public Health Services.

14. The meeting was adjourned at 9:20 p.m.

MEETING ATTENDANCE

. . . cont'd . . .

MEMBERS:

- Jack A. Palmer
- James M. Holden
- Chuck F. Sepsy
- James G. Taylor
- Tom Gilbertson
- Tom Campbell
- Sherry Callouette
- Mark Robbins
- Kevin Dowling
- Bob Phillips
- Michael P. Lynch
- K. Guttman

GUESTS

- Henry Chan
- Roy Bass
- Shlomo Rosenfeld
- John Clark
- Douglas Chan
- Steve Kwan
- Gil Carlson
- Dave Crum
- Dave Hofer
- Sharon Drummond
- Ernie Tuazon
- William Thompson
- James Hill

DOE-2 COMPUTER PROGRAM FOR BUILDING ENERGY ANALYSIS IS COURSE SUBJECT

A concentrated four-day short course, "Building Energy Analysis Using the DOE-2 Computer Program," will be presented June 2-5, 1981, at the University of California, Berkley.

The course will include lectures and hands-on exercises on the use of the DOE-2 energy-analysis computer program to predict the potential of various conservation measures for new buildings or retrofits for existing ones. Also covered will be the format and content of the proposed national building code, Building Energy Performance Standards (BEPS), and the state of California's Performance Method Energy Regulations.

DOE-2 COMPUTER PROGRAM

. . . cont'd . . .

The course instructors are Zulfikar O. Cumali and Paul K. Davis, members of a Bay Area consulting firm. Cumali was involved in developing the CALERDA (later DOE-1/2) building energy-analysis computer program in cooperation with UC's Lawrence Berkeley Laboratory. He and Davis have extensive experience in energy analysis, environment systems design, and computer applications.

Registration for the course is \$550. Advance registration is necessary, as enrollment will be limited.

Further information is available from Continuing Education in Engineering, University of California Extension, 2223 Fulton Street, Berkeley, CA 94720; phone (415) 642-4151.



MEETING NOTICE

DATE: MARCH 5, 1981
TIME: 5:30 Social Hour
6:30 Dinner

LOCATION: ENGINEERS' CLUB
16th Floor
180 Sansome Street
San Francisco

PROGRAM: "GAS AND ELECTRIC RATES -
WHAT'S AHEAD DOWN THE
ROAD"

Ms. Paula Rosput, Supervisor, Rate Evaluation, Pacific Gas & Electric Co., will tell us what is in the immediate future (including the new A-21 "Time of Day" electric rate schedule) and what the more distant outlook will be.

Unless you are planning to move to a cave in Outer Mongolia, this is a program you can't afford to miss! It will affect us all.

See you there!

PROGRAM CHAIRMAN: Bob Phillips

HONOR ROLL

LILLARD COMPANY
1313 Galaxy Way
Concord, CA
(415) 827-4040

***** NOTICE *****

ASHRAE RESEARCH

If you have been listening, and if you read the insert in the January Fog Dispenser, you realize the importance of each one of us making a contribution to our research program. Some of our members have not sent in their checks yet. Last year, the average individual member contribution was about \$18.00. But, contribute as you can. The more the better, but even a \$5.00 check will help.

Make checks payable to ASHRAE Research and mail to:

Carl H. Jordan
Skidmore, Owings & Merrill
62 First Street
San Francisco, California 94105



Corner

President's



The Chapter year is progressing rapidly. It is already nominating time and the Nominating Committee, consisting of Dick Glumac, Chairman, Tom White, Dart Rinefort, Jerry Yaffee, and Jim Holden, ex officio member, met on February 12, in Dick Glumac's office to prepare a slate of nominees who appear elsewhere in this issue. Further nominations will be taken from the floor, at the March chapter meeting. Then ballots will be mailed, to be returned prior to the April meeting for final tally.

By now you should all have received your copies of the 1981 roster. Thanks to Glenn Cheek and Jack Zarour for a good job despite the three week delay on the part of ASAP, our printer, who had equipment problems. Our apologies to Willy Gee, who for some reason or other got left out of the roster.

Jim Nemechek has been working hard on setting up a suppliers table top display night. San Diego chapter started this last year, grossing \$5,000 and netting \$2,000 for ASHRAE Research. This got Gus Gendler stirred up and a lot has been going on behind the scene to get a similar program going here. The way it works, suppliers pay approximately \$150 for a table to display their products. 35 suppliers would gross \$5,250. Since this affair would be held on a non-chapter night at a location other than the Engineers' Club, the expense would be for the hall and the dinner (free to members), and the balance would then go to ASHRAE Research. We plan to share our first table top display night, a year from April, with ASPE who has been doing this successfully for some time.

The joint Bay Area Engineers Council is still looking for an editorial member from our chapter. Any aspiring writers should contact Tom Reinarts at Keller and Gannon.

The California Energy Commission is attempting to develop Passive Solar Standards. A conference was held on Tuesday, February 10, at the State Building, 455 Golden Gate Ave., San Francisco. Tom Campbell, Gus Gendler, and Tom Simonson attended from our chapter. I have received a great deal of data concerning this program which is far too voluminous to publish in the Fog Dispenser. Anyone interested in further information, please contact Tom Campbell or myself.

REPORT BY THE NOMINATING COMMITTEE

The following persons comprising the Nominating Committee met on February 12, for the purpose of recommending to the Membership, the Slate of Officers and Governors for the Fiscal Year 1981/1982:

- Jerry Yaffe
- Thomas White
- W. Dart Rinefort
- Jim Holden (ex-officio member of committee)
- Dick Glumac

The first order of business was the election of a chairman. Mr. Glumac was elected to chair the meeting. After due consideration, the Nominating Committee is presenting the following Slate of Officers and Governors for the 1981/1982 Fiscal Year:

For Officers:

- Robert Phillips - President
- Thomas Campbell - President Elect
- James Taylor - Secretary
- Kevin F. Dowling - Treasurer

Board:

- James G. Nemechek - Board Member
- David Rifkin - Board Member
- James M. Holden - Past President

These nominations will be presented at the March Meeting at which time other nominations from the floor can be accepted.

NOTICE

The Board of Registration for Professional Engineers has announced there will be an informational hearing at 7:00 p.m. on March 11th in Los Angeles. The purpose is to discuss the present procedure for individual examination as currently outlined in Board Rule 437 to see whether this should be kept in effect or deleted. For further information contact Warren Holman at (916) 445-5544.

The Board is also considering a new rule of procedure which would establish a system to provide the public with

NOTICE . . . cont'd . . .

information regarding the disposition of complaints against licensees. This would include the numbers and disposition of complaints received, disciplinary actions, and license status.

TENNIS TOURNAMENT

The chapter will conduct the annual tournament on Friday, April 24th between 1 and 4 PM at the San Francisco Tennis Club, 5th & Brannan Streets. We have reserved indoor courts. The club has showers, whirlpool, steam room, and sauna. Last year, 28 players had a great time playing doubles. Groups will be divided according to playing ability. Please call Jack Kniveton at 777-5333 to reserve a spot.

MEETING ATTENDANCE

February 5, 1981

MEMBERS:

- | | |
|------------------|-------------------|
| Steve Sprague | Tom Judson |
| Dan Vandament | Leo Dwyer |
| Dick Charles | Peter Tidmarsh |
| Don Bryant | Michael P. Lynch |
| Bob Braun | Mike Reichlin |
| Steve Taylor | Dave Attard |
| Jack Zarour | Jack Kniveton |
| Gene Valerio | Charles Hardeman |
| Glenn Umont | Dottie Roark |
| Chuck McLaughlin | Don Dickson |
| Richard Frenzel | George Aronovsky |
| Kenneth Hill | Arnold Bletnitsky |
| Teddie E. Jacob | John Brose |
| John Karmiris | Bob Judd |
| Walt Schneider | Dieter Meissner |
| Dick Porter | Art Gamble |
| John Pappas | Alan Moyal |
| Dave Rifkin | Patrick Teng |
| Douglas Daniels | Richard Gee |
| Richard Caldwell | Frank Mayhew |
| Gus Gendler | Robert Reinz |
| Cal Laws | Thomas Reinarts |
| Bob Wistort | Jim Kanomata |
| Alice Meyer | Dick Fujioka |
| Alex C. Brown | Dev Singh |
| Todd Elmgren | Glenn Claycomb |
| Kaz Inouye | Sam Yee |
| Ted Stalzer | Chuck Tarnoff |

COPY DEADLINE

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

Meeting date	Copy deadline
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March 5, 1981	Feb. 13, 1981
April 2, 1981	March 12, 1981
May—Social	April 16, 1981
June 4, 1981	May 14, 1981

Published Monthly, October through June, by the Golden Gate Chapter of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, c/o Duplicating Associates, 370 Brannan Street, San Francisco, CA 94107—Phone 495-4552

1980-81 OFFICERS
 James M. Holden President
 Robert Phillips President-Elect
 Thomas Campbell Secretary
 James G. Taylor Treasurer

BOARD OF DIRECTORS

Kevin F. Dowling
 Thomas A. Gilbertson
 James G. Nemecheck

MAIL OR PHONE NEWS TO:

Rich Wells, *Editor*
 925 Kearny Street
 El Cerrito, CA 94530
 (415) 524-1477

MINUTES FROM LAST MEETING

FEBRUARY 5, 1981

Attendance: 78 members
26 guests

1. President James Holden called the meeting to order at the Engineers' Club in San Francisco at 7:20 p.m.
2. Self-introduction of members and guests followed.
3. The minutes of the January 8th meeting were approved with the correction that James Curtin died in November, not New Year's Day.
4. Sherman Brown reported briefly on the Educational Seminar. This is scheduled for the first four Tuesdays in March.
5. The members were reminded that the annual tennis tournament is scheduled for April 24th. Additional details will appear in the Fog Dispenser.
6. President Holden was pleased to introduce National Society President Charles Sepsy. President Sepsy reported that the meeting in Chicago was the largest ever. The Trade Show and Exposition was a tremendous success and over 3,000 members registered for the technical sessions.

Tom White, Don Bryant, and Karl Guttmann were named Fellows of the society.

Additionally, he reported that the state of the society was good and that the relocation into our own building in Atlanta is progressing on schedule. He encouraged members to attempt to stimulate greater involvement from students in local colleges and universities. A Washington, D.C. office will be opened so as to provide liaison with various governmental agencies involved in writing standards and regulations. The society will have a new technical director, Mr. Frank Koda, formerly with the Illuminating Engineers' Society.

Reports have been received and will be adopted by ASHRAE on the subjects of Legionnaire's disease and Ozone depletion.

In the field of energy, ASHRAE continues to stress conservation. The first eight chapters of ASHRAE 90-75 have been revised and reprinted as ASHRAE 90A-80. It is felt that BEPS may be changed to a voluntary recommendation rather than a mandatory regulation. The ASHRAE 100 Series of Standards for Energy Conservation in existing buildings will be published in April. New Standards 62 R and 75 R have been approved.

Lastly, President Sepsy urged that all members participate in support of the Research Committee. Over \$500,000 has been funded for projects this year.

7. A scholarship raffle was conducted by Doug Daniels. Winners were Kaz Inouye, Walt Schneider, and Kevin Dowling.

8. President-elect Phillips introduced Mr. Gilbert F. Carlson, our speaker for the evening. Gil is Technical Director of the Fluid Handling Division of IT&T. He is a graduate of Purdue University

His topic for the evening was entitled "Variable Flow Pumping" and his talk emphasized the energy conservation aspects of this system. Using a series of well-designed transparencies, he was able to show the audience the evolution of the concept, beginning with the problems encountered years ago, with the use of two-way valves. As result of much trial and error, the system has evolved to the point where considerable energy savings can be realized. The industry can provide the engineer with tools necessary to analyze the job conditions and determine the most efficient system. Questions and answers followed.

9. The meeting was adjourned at 9:35 p.m.

ATTENTION GOLFERS

Mark your calender - get your foursome together. We are joining with the Plumbing & Heating Club of Northern California at the Meadow Club in Marin county on Friday, April 24th -- the package will include green fees, golf cart, prime rib dinner and prizes. Lots of fun at a great course. Plan now to attend. More to follow next month.

MINUTES OF CODE COMMITTEE MEETING #6

Present: Harjinder Ajmani
Tom Campbell
Mat Chikhale
Dick Glumac

Absent: Bob Braun
Jim Breese
Bob Voelz

Guest: Franklin Lew, City of San
Francisco, B.B.I

Date: February 9, 1981

1. Mr. Franklin Lew presented to the Committee the sample of report for code changes. ASHRAE Code Committee will follow the same format.

2. Mr. Franklin Lew requested that each code change proposed by our Committee be accompanied by a brief description of reasons for change.

3. The S.F. Building Code shall adopt 1979 UBC plus some of 1980 UBC supplements. Even though some 1981 UBC revisions are known, they will not be adopted by the City of San Francisco at this time.

4. Committee should flag major differences between UMC and Chapter 5] of the San Francisco Building Code.

Committee continued the review of UMC vs. San Francisco Building Code, Chapter 5].

Following comments are proposed on Chapter 6 Combustion Air:

- a) Sec. 604(a) (1) UMC allows a little greater use of aluminum ducts but difference is minor and we recommend therefore the use of UMC.
- b) Sec. 607 of UMC - provisions for design temperatures below 20° F is not applicable to City of San Francisco.
- c) Sec 608 of UMC regarding the use of combustion air from an enclosed space such as parking garage should be retained.

5. Chapters remaining for review and responsibility for review:

- 7 Heating System - Mat Chikhale

- 8 Vented Decor. Appliance - Jim Breese

- 9 Not ready for review by city

-10 Ducts - Tom Campbell

-11 Vent System - H. Ajmani

-12, 17 - No paste-ups. No provision in City Code. Our Committee should make general recommendations to adapt them or not. Each member to read.

-18 Incinerators - D. M. Glumac

-19 Miscellaneous Appliances - R. Braun

-20 Not ready

-21 UMC Appendix #21 - Robert Voelz

-22 UMC Appendix #22 - Fuel Gas Piping: Not required since it is included in San Francisco Plumbing Code

6. Review of UBC Chapter 40 vs. San Francisco Article 40:

Dick Glumac's report - attached was adopted. In short, it is recommended to the City of San Francisco to adopt UBC code without any changes.

7. Review of UBC Chapter 39 vs. San Francisco Article 40 (to be reported under separate cover).

8. Review of Chapter 42 was completed but we shall reserve the final comments until "paste-ups" are obtained from the City of San Francisco.

9. Chapter 49 - Single Dwelling Unit Elevators - ASHRAE

10. Next meeting of the Committee:

Monday, February 23, 1981

Time: 1:30 till 4:00 pm

Place: Glumac & Associates, Inc.

Please bring your comments regarding your assigned chapters so we can review them more expeditiously. If you cannot attend, please send in written comments.

MINUTES OF MEETING - December 4, 1980
...cont'd...

capacity on 24-hour per day basis. The tank is 180 feet square by 25 feet deep located one block from cooling plant and designed so that roof was three feet below grade and strong enough to carry two to three story buildings which were contemplated for the tank site. The tank is filled at all times and operates with 42° water at the bottom and as much as a 15° higher temperature at the top. Piping grids at the top and the bottom are designed to discharge into and draw from the tank with practically no turbulence. Excellent stratification is obtained. The system is performing well.

Richard Charles, of Charles and Braun, and Region X Energy Management Chairman described a cooling system for the central TV transmitter tower on Mount Sutro in San Francisco. The tower was owned by a major national network who wanted a full refrigeration for the transmission equipment. This amounted to 375 tons plus 100% backup. Two separate PG&E substations are available to provide power. System was eventually designed taking advantage of usual cool ambient air of Mt. Sutro. All of the outside air is maintained with prefilters, bag filters and charcoaled filters.

He also discussed another project involving two identical buildings in Emeryville, California. Each building is 215,000 square feet of floor space with 50% glazing on the walls.

The first building, built before CEC Non-residential Energy Regulations became effective, has five watts per square foot of lighting, no economizer cycle and an unsealed dual duct system. The power bill was \$25,000 in the month of September.

The sister building designed according to State Regulation has reflective glass on south and bronze glass on the north. Lighting is three watts per square foot. Energy bill was \$8,000 per month in the summer and \$5,000 per month throughout the rest of the year.

The Chairman reluctantly cut off questions and adjourned the meeting at 10:05 PM.

MEETING ATTENDANCE

January 8, 1981

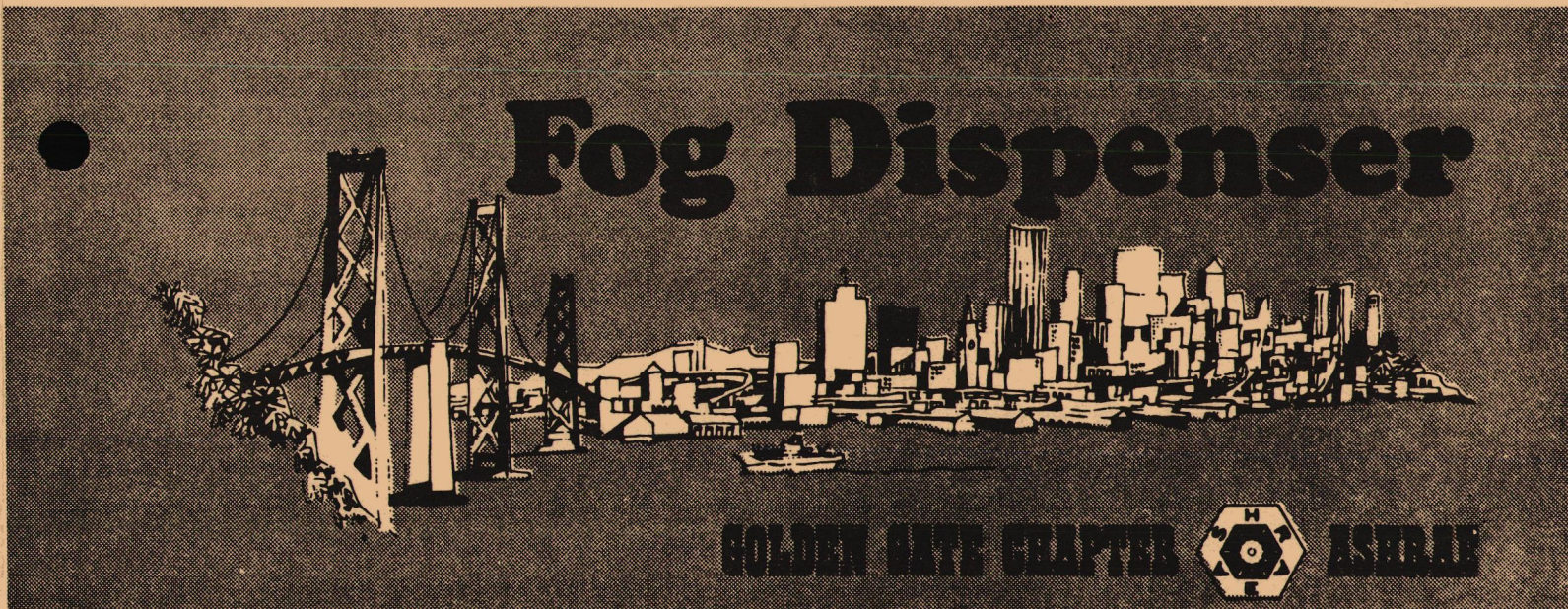
MEMBERS:

- | | |
|------------------|------------------|
| Richard E. Gee | Walter Schneider |
| Mike Grimes | Harry Angerman |
| Don Dickson | Daniel Mason |
| Jim Breese | Rich Leao |
| Roy Gifford | Glenn Claycomb |
| Bob Braun | Dev Singh |
| Steve Sprague | Harjinder Ajmani |
| Ed Schommer | John Borse |
| Dan Bryant | Dale Yager |
| Roy G. Anderson | Cyril Sjoberg |
| Tom Conroy | Keith Lescure |
| Kaz Inouye | Lew Pollock |
| Hasan Burney | Richard Hamer |
| Todd Elmgren | Carl H. Jordan |
| Kenneth Hill | Art Gamble |
| Dale Missimer | Chuck Kopf |
| Alice Meyer | Howard Friesen |
| Bruce Montgomery | Steve Taylor |
| Rich Wells | Jack Zarour |
| Dick Hughes | Richard Emerson |
| Richard Frenzel | Kevin Dowling |
| Bob Judd | Earl Carrier |
| Frank Mayhew | Tom Gilbertson |
| Sam Yee | Ed Brady |
| Teddie E. Jacob | Bob Phillips |
| Gino Colacchia | Gene Valerio |
| Rich Magarian | Jim Taylor |
| Dick Charles | Jack Kniveton |
| William Wong | Marc Elmore |
| Richard Mayer | Dave Rifkin |
| Don Bradshaw | Dick Friedman |
| Scott Tripp | Sam Yamoto |
| Stanley Eng | Mike Rubio |
| Richard Yates | Tom Judson |
| Grant Bentley | Ted Stalzer |

GUESTS:

- | | |
|------------------|------------------|
| Jon Hermstad | Daniel Corrigan |
| James Hill | Trafford Preston |
| June Keuhey | Tim Coyle |
| Richard Caldwell | Gordon Goodding |

We regret the death of Miles Suda, who died on January 8, 1981 at the age of 59.



VOLUME XX NO. 5

FEBRUARY 1981

MEETING NOTICE

DATE: FEBRUARY 5, 1981

TIME: 5:30 Social Hour
6:30 Dinner

LOCATION: ENGINEERS' CLUB
16th Floor
180 Sansome St.
San Francisco

PROGRAM: "VARIABLE FLOW PUMPING"

Mr. Gil Carlson, Director of Technical Services, ITT Fluid Handling Division, and nationally recognized authority in the field of hydraulics associated with heating and air conditioning, will be our featured speaker.

Mr. Carlson has been active in the development of such commonly utilized design features as primary-secondary pumping systems, compression tank applications, NPSH evaluation charts, control valve selection and water-side balance procedures.

Mr. Carlson's talks at past meetings have been among the most popular programs and this year's presentation on Variable Flow Pumping shouldn't be missed...

PROGRAM CHAIRMAN: Bob Phillips

HONOR ROLL

JYA Consulting Engineers, Inc.
50 Brannan Street
San Francisco, CA 94107

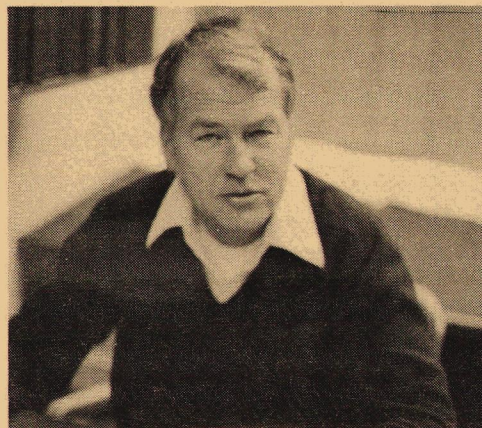
- PETER JOHNSON
- SAM YAMAUCHI
- JAN SMEKENS
- DARRYL LACKEY
- JOHN YEE
- GEORGE LIM

***** NOTICE *****

The Western Division Manager of DATA-SPHERE CORP., our December Honor Roll donor, is MR. JIM HACKBARTH, whose name was incorrectly spelled in that issue. The editor's apology is extended to Mr. Hackbarth for the oversight.

Corner

President's



An unfortunate situation occurred at our January chapter meeting. 43 confirmation cards were mailed in to the Engineers' Club. After 70 people were seated for dinner, at least 8 were turned away because of lack of provisions. This is indeed a sad happening.

First, we owe a humble apology to Jim Smith, the manager. Secondly, we need to realize that we cannot expect to be served dinner unless we have confirmed that we will attend. I can never recall such a disparity between confirmations and attendees. Do not expect to be seated unless you have had the consideration to mail in a confirmation.

By publication date of this issue you should have received your new roster. Thanks to Glenn Cheek and Jack Zarour another roster has been produced.

...cont'd p. 3...

MINUTES OF CODE COMMITTEE MEETING #5

Present: Bob Braun, Tom Campbell, Jim Breese, Mat Chikhale, Harjinder Ajmani, Dick Glumac

Absent: Bob Voelz

Date: January 12, 1981

1. Committee reviewed UMC vs S.F. Building Code, Article 51, in general terms only. The comments were written under item 5 below and are being sent to Bureau of Building Inspection (BBI).

2. Mr. Franklin Lew of BBI attended the meeting and helped in review.

3. Next special meeting will be held on
DATE: January 23, 1981
TIME: 12:15 (working lunch)
PLACE: Glumac & Assoc., Inc.
One Embarcadero Center

4. Time table for SFBC review:
First Draft: February 15, 1981; all except 51, 41
Art. 51, 41: early March, 1981
Submittal to Supervisors: June 30, 1981
entire completed code revision for adoption.

5. Review of UMC vs. Article 51
a) Chapter 4 of UMC is dealing with definitions. Our committee would like to review definitions in UMC just to assure the continuity with Chapter 5. Mr. Lew will send us the "paste-ups".
b) Committee voted unanimously to

...cont'd p.3...

MINUTES OF MEETING - December 4, 1980
...cont'd...

Education seminar at the Denver ASHRAE meeting. Continuing Education would enable the membership to prepare for recertification of PE licenses and keep up with changes in technology. A survey will be included in the January Fog Dispenser to evaluate members' interest.

10. Wally Donley, Regional Chairman, reported that the Denver meeting was the largest ever, with over 1,500 in attendance. National membership has risen by 6%. An Award of Excellence for 1979-80 was presented to Tom Gilbertson, immediate Past President.

11. President Elect Bob Phillips introduced the evening program. It was a panel discussion by five local engineers on Energy Saving Techniques which they had incorporated into various projects. Each participant spoke for ten minutes and time was allowed for questions from other panelists and the audience. Some extremely interesting innovations were discussed.

Carl Jordan, Chief Mechanical Engineer for Skidmore, Owings & Merrill, spoke on how his office complies with the energy budget requirements of Division 2 of the CEC Nonresidential Energy Standards. The budget for a high rise office building in San Francisco is 126,000 BTUS per square foot per year. SOM's jobs use variable volume with reheat of outside ambient air for the perimeter zones. Lighting has been reduced to two watts per square foot successfully, and 1.8 square watts per square foot will be tried. Seventy foot candles are maintained and return air fixtures are utilized. Air delivery rates of one half to one third CFM per square foot are employed to reduce fan size and energy. Outside air is limited to 5 CFM per person. Fan horsepower reduced by reducing loads and also static pressures are held at 3.5 - 4.5 inches. This is accomplished by careful selection of outside air louvers, filter banks, coil pressure drops, sound traps and providing cooling coil bypass on economizer cycle. Fans are usually vane-axial with adjustable vanes and are frequently used in parallel.

High efficiency motors are utilized which show payback in six months to three years. Cooling towers are drawthrough rather than blow through. Distribution piping sizes are enlarged to reduce pressure drop.

Lively questions and answers followed. It was stated that the increased first costs were largely offset by reduction in size of equipment needed.

Tom Gilbertson, President of L & H Air Co., described an innovative system using capacity of larger cooling towers where and when required with a minimum number of controls. Water from tower can be used to precool outside air to condensers on direct expansion systems. DX system operates when additional cooling is needed. This is more efficient than 100% outside air economizer cycle. Energy is saved by using larger coils and having dry coils at 400 fpm.

Frank Mayhew, G. V. Yamas Co., spoke on energy management by large commercial users. California is now an energy expensive area. Macy's Department Store with outlets throughout northern California could not find adequate time clocks to control lighting. Installed a micro-computer and are operable by store engineers. Performance is monitored by headquarters over private unlisted telephone lines. System allowed Macy's to evaluate where energy was being used at any time of day and, as a result additional lighting circuits were connected to computers. Sensors are installed which will override time cycle. Night purge with outside air is utilized when outside air is less than 60°F to precool building and contents to 70°F by morning.

Tom Simonson, President of G.M. and T.R. Simonson, described an interesting installation at Stanford University. The problem was to design the least expensive central cooling plant for 5,000 ton load in 1975 which would handle 8,000 tons anticipated in 1978. Campus profile showed peak at 1:00 pm and no load at night. The solution was to install a four million gallon storage tank and to utilize chiller

...cont'd p. 6...

COPY DEADLINE

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

Meeting date Copy deadline

Feb. 5, 1981	Jan. 16, 1981
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James M. Holden President
Robert Phillips President-Elect
Thomas Campbell Secretary
James G. Taylor Treasurer

BOARD OF DIRECTORS

Kevin F. Dowling
Thomas A. Gilbertson
James G. Nemecheck

MAIL OR PHONE NEWS TO:

Rich Wells, *Editor*
925 Kearny Street
El Cerrito, CA 94530
(415) 524-1477

PRESIDENT'S CORNER

...cont'd...

In the writing field an opening has occurred on the editorial board of the new Engineering Monthly being published by the Bay Area Joint Engineering Council. Those interested should contact Tom Reinarts, of Keller and Gannon. This publication is soon due off the press and the council has offered to provide each member of each engineering chapter the first copy free although a \$1 per member donation has been requested for the first year subscription. Our board has decided that due to our commitment to our temperature data publication, we cannot afford this expense at present. Any individual help will be greatly appreciated.

The usual hard work involved in preparing for our annual seminar is being undertaken at present by Sherman Brown and Grant Bentley. Flyers will be in the mail soon announcing dates, topics, and speakers. Assistance will be needed so if you are asked to help out please accept.

Anyone having news of interest to the membership please feel free to forward same to Rich Wells, Editor of the Fog Dispenser.

MINUTES OF CODE COMMITTEE MEETING #5

...cont'd...

support the city in the basic approach to adopt the UMC by reference.

- c) Suggestion was also made to assume that the UMC is basically correct and that we should look for items in SFBC which are not contained in UMC or items which are better in SFBC than in UMC.

- 6. Plumbing and Electrical Code review to be done in 1982.

...cont'd...

MINUTES OF CODE COMMITTEE MEETING

...cont'd...

- 7. The regular meeting of the Code Committee shall be held on: DATE: February 9, 1981 TIME: 2:30 pm PLACE: Glumac & Associates, Inc. One Embarcadero Center
8. Review of Chapter 34 ASHRAE Code Committee recommends the use of UBC Chapter 34 in its entirety.
9. Chapter 36 ASHRAE Code Committee recommends that SFBC retains para. #3601(a) of UBC since we feel that the 12 ft. high penthouse is better suited for housing of the mechanical equipment than the 10 ft. height.

TREASURER'S REPORT

Table with financial data for December 1980: TOTAL ASSETS \$5,802.86, LIABILITIES 0.00, MEMBER'S EQUITY \$5,802.86

- ANNOUNCEMENT -

The chapter will conduct the annual Tennis Tournament on Friday, April 24th, 1 - 4 PM at the San Francisco Tennis Club, 5th & Brannan Sts. We have reserved indoor courts. The club has showers, whirlpool, steam room and sauna. Last year 28 players had a great time playing doubles. Groups will be divided according to playing ability. Please call Jack Kniveton at 777-5333 to reserve a spot.

MINUTES OF MEETING - JANUARY 8, 1981

Attendance: 70 members
8 guests

1. Pres. Elect Robert Phillips called the meeting to order at the Engineers' Club in San Francisco at 7:27 PM.
2. Self-introduction of members and guests followed.
3. Pres. Elect Phillips reported only 42 dinner cards were sent in and the Engineers' Club was forced to cut off at 60 dinners because of lack of food. Members were urged to send in the cards or call the club.
4. Richard Gee reported the passing of James Curtin on New Years day. Remarks by Richard and Bob Phillips followed.
5. Grant Bentley reported on the progress of the seminar scheduled for the four Tuesdays in March. The topics will relate to energy. Announcements will be mailed shortly.
6. The May Social has been replaced by the events at the San Jose CRC. Kevin Dowling announced a tour of the Embarcadero #4 in May. The exact date to be announced.
7. Gene Valerio reported on the ASHRAE national meeting in Chicago, Jan. 25 - 29.
8. Pres. Elect Phillips discussed the progress of the vendor's table-top night. Jim Nemechek is gathering information.
9. Dick Friedman recommended elimination of Committee Reports as a means of speeding up meetings. He expressed a concern for the late start of the programs as being a hardship on some members.
10. Past President Tom Gilbertson presented a 50-year certificate to Earl Carrier. Mr. Carrier, a graduate of the University of Wisconsin, started in 1923 in a sheet metal shop.
11. The scholarship raffle was conducted by Dick Hughes.

12. The evening's program was presented by Ed Bradley of Pacific Gas and Electric. Mr. Bradley presented slides and information on the Geo-Thermal power generation projects in northern California.

13. The meeting was adjourned at 8:54 PM by President Elect Phillips.

MINUTES OF MEETING - December 4, 1980

Attendance: 77 members
17 guests

1. President James Holden called a meeting to order at the Engineers' Club in San Francisco at 7:20 PM.
2. Self-introduction of members and guests followed. Tom White is the latest member of LMC (Life Members Club).
3. Minutes were approved with the correction of the spelling of Cy Hansen's name.
4. Annual Social - The membership decided that the Chapter plan to hold the 1981 Social in conjunction with the CRC in San Jose, May 1981.
5. Don Delaney announced that he will chair the 1981 golf tournament and that it will be held April 24, 1981 in conjunction with Plumbing and Heating Club Tournament.
6. It was announced that the 1984 CRC will be a joint meeting with Region XI in Portland.
7. Gus Gendler, Chairman of the Research Fund Committee, spoke on the objectives of the Society. Suggested that funds might be raised, as is done by ASPE, by having vendors in Table Top Product Night. Suggestion was referred to the board.
8. Chairman Borwn announced that the 1981 seminar on March 3, 10, 17 and 24 will have the theme: "Energy Conservation Techniques."
9. Don Bryant reported on the Continuing

...cont'd p. 5...

MEETING ATTENDANCE

DECEMBER 4, 1980

MEMBERS:

- | | |
|-------------------|-------------------|
| Kaz Inouye | Tom Simonson |
| Lewis Brooks | Frank Mayhew |
| Stanley Eng | Bob Phillips |
| Bill Chapman | Jim Taylor |
| Joe Beck | Jim Holden |
| John Pappas | Wallace L. Donley |
| Cal Laws | William Wong |
| Rich Wells | Gil Hensley |
| Jeff Highes | Hasan Burney |
| Bob Judd | Hendrik J. Mouw |
| Leo Dwyer | Alice Meyer |
| Tom Gilbertson | Chuck McLaughlin |
| Richard Yates | Gus Gendler |
| S. Callouette | Don Delaney |
| Dottie Roark | Dick Fujioka |
| Dan Mason | Tom White |
| Phil Flintzer | Walt Schneider |
| Sam R. Tee | John Brose |
| Glenn Claycomb | Rick Paillon |
| John Karmins | Rich Leao |
| Alex C. Brown | Gene McCabe |
| Norman Hum | Pete Tidmarsh |
| Richard Gee | R. Scheunert |
| Katherine B. Fitz | Dick Friedman |
| Donald L. Nurisso | Doug Daniels |
| Gary Wilkinson | Steve Taylor |
| Gino Colacchia | |
| Jeff Kerl | <u>GUESTS:</u> |
| Ed Merino | Scott Tripp |
| Bob Roach | S.J. Sailer |
| Willie Gee | John Busch |
| Dick Hughes | Michael Gallagher |
| Jim Hall | Bob Sarro (Sacto) |
| Gay Yamagiwa | Len Harrison |
| William Tang | Phil Williams |
| Jack Zarour | Craig Fishbach |
| Ubo Mulder | John Yamas |
| Jim Breese | Dave Holm |
| Zulfikar Cumali | Cathy Ward |
| Roy G. Anderson | Bob Brouhard |
| Clyde Wilson-Reid | F. Armstrong |
| Robert H. Braun | John Coppini |
| Don Bryant | Dawn Black |
| Richard Frenzel | Bill Giussi |
| Sherman Brown | Larissa Albin |
| Ed Schommer | Arica Dacunos- |
| Dick Charles | Bobolian |
| Carl H. Jordan | |
| Tom Campbell | |
| Kevin Dowling | |

--- NOTICE ---

WANT A WAY TO INCREASE THE CHAPTER SCHOLSHIP FUND AND SEE THAT MORE FINANCIAL AID GOES TO OUR LOCAL COLLEGE AND UNIVERSITY STUDENTS? Donate a special gift for the raffle - something that you, your wife, or friend, would enjoy receiving - dinner at a fine restaurant, tickets to a play, etc. Your personal gift or a gift from your firm for the scholarship fund will be tax deductible and all donations for raffle tickets will be direct contributions to the fund.

Contact Dick Hughes, or Jody, at 391-6579 and your gift will be gratefully received and picked up if necessary.

The raffle gift for October 2nd was donated by FREDERICK H. KOHLOSS & ASSOC., INC.

--- NOTICE ---

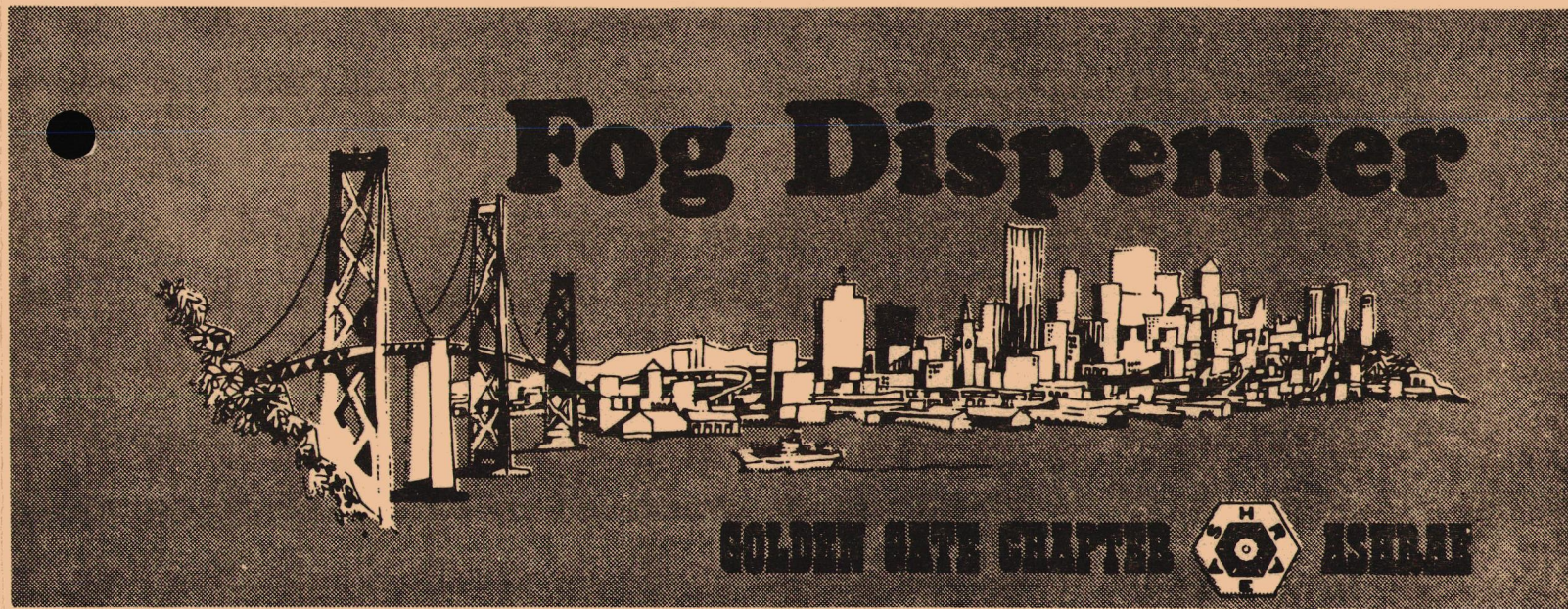
CONTINUING EDUCATION IN ENGINEERING UC BERKELEY EXTENSION

Air Conditioning and Heating Psychrometry

University Extension, UC Berkeley, will offer an evening course in Air Conditioning and Heating Psychrometry X469 with 3 units of professional credit in Mechanical Engineering. The course is scheduled to meet on Mondays, 7 - 9:30 PM, February 2 to May 4, 1981, at Richardson Hall, University of California Extension Center, 55 Laguna St.(off Market), San Francisco.

This is a beginning course in a series of four courses in air conditioning, heating, and refrigerating. Upon successful completion of the series, a Certificate of Accomplishment is awarded by Golden Gate Chapter, ASHRAE, to acknowledge your professional development through continuing education.

For further information call either UC Extension, 642-4151, or Don Bryant (instructor) at 584-0765.



VOLUME XX NO. 4

JANUARY 1981

MEETING NOTICE

DATE: JANUARY 8, 1981

TIME: 5:30 - SOCIAL HOUR
6:30 - DINNER

LOCATION: ENGINEERS' CLUB
16th FLOOR
180 SANSOME ST.
SAN FRANCISCO

PROGRAM: "POWER FROM THE GROUND"

Mr. Ed Brady and an as yet unannounced speaker from Pacific Gas & Electric Co. will describe PG & E's power generation facilities and some of the unusual problems associated with the design and operation of the geo-thermal plant at the Geysers.

See you there...

PROGRAM CHAIRMAN: Bob Phillips

HONOR ROLL

Q INDUSTRIES INC.
404 Talbert St.
Daly City, CA 94014
(415) 467-0160

PHIL RUSSO
JOYCE OWEN
JEFF HUGHES
KIM PALMER

Please contact Dave Rifkin, at Marina Heating & AC, (415) 786-3500, if your organization isn't already on the Honor Roll mailing list.

The minutes of the December 4th meeting will be published in the next issue.

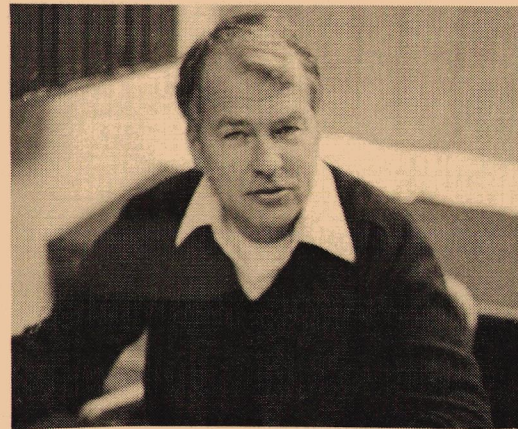
- E X T R A - - E X T R A -

Congratulations go to Ed Merino of Hess, Greiner and Polland (H.G.P.). On November 22, 1980, Ed was unanimously elected President of HGP company wide. Ed will continue in his capacity as manager of HGP's local office in San Mateo.



Corner

President's



From reading your Bylaws it appears that the Golden Gate Chapter has become Incorporated and is, or could be, running a business. Before we can approve your Bylaws as submitted, we will have to consult further with ASHRAE's legal counsel.

I have enclosed a copy of the latest Model Constitution and Bylaws which are closely followed by practically every Chapter in ASHRAE. It would be much easier for us to review and approve your Bylaws if they followed that Model more closely. At this point I am not sure we can approve your Bylaws without extensive revision, especially to section 1.2.

I would appreciate if you would review this matter with your Board of Governors and let me know how you wish to proceed on it.

Very truly yours,
Douglas L. Stolz"

"Dear Mr. Stolz,

I am answering your letter of October 6, 1980, concerning our Chapter Bylaws. As you are aware, these Bylaws were adopted by the Golden Gate Chapter in 1969 and a copy has been on file in your office since that date.

...cont'd...

I'm making this month's column easy on myself by publishing some correspondence regarding our chapter bylaws. First is a copy of a letter received from Mr. Douglas L. Stolz, from society headquarters, followed by my answer. I want the chapter to be aware of what is going on.

"Dear Mr. Holden,

A copy of the revised Bylaws from your Chapter was received by the Charter and Bylaws Committee just prior to January 1, 1979. The reason you have not heard from us prior to this is that we are, frankly, completely confused by that submittal. Primarily, we are concerned with Article I, section 1.2 of your bylaws and had to consult with ASHRAE'S legal counsel on it.

COPY DEADLINE	
In order to meet our publication dates, we have established the following as the last possible date, that copy for the FOG DISPENSER can be in the editor's hands:	
Meeting date	Copy deadline
Jan. 8, 1981	Dec. 19, 1980
Feb. 5, 1981	Jan. 16, 1981
March 5, 1981	Feb. 13, 1981
April 2, 1981	March 12, 1981
May—Social	April 16, 1981
June 4, 1981	May 14, 1981

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 Rich Wells, *Editor*
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 El Cerrito, CA 94530
 (415) 524-1477

PRESIDENT'S CORNER ...cont'd...

For the last eleven years our incorporation has been common knowledge in the society and has been discussed on numerous occasions at Region X CRC meetings with society presidents. At no time has any national officer questioned the legality of our status. As a matter of fact, I believe you will find that other chapters have followed our lead in incorporating.

In 1979 we made a change in our Bylaws, adopting the office of president elect in lieu of vice president, to eliminate voting on that office, assuring that person of becoming president the following year and allowing him to fill committee chairmanships in advance. Evidently this simple change brought our Bylaws to your attention.

In answer to your question of how we wish to proceed, we do not contemplate changing our status. We are a non-profit organization and are not running a business as such.

Very truly yours,
James M. Holden; President
Golden Gate Chapter"

Two items of interest that were agreed upon at the last chapter meeting are:

1. Don Delaney, our golf chairman, has confirmed April 24, 1981, as the date of our annual golf tournament, to be held at the Meadow Club in Kentfield. This will be a joint tournament (separate flights) with the Plumbing and Heating Club. Thanks to Don for arranging this.

2. Our annual social this year will be the CRC social, to be held at the Marriott Great America in Santa Clara, with the San Jose chapter as host. There will be no cost to our chapter treasury and no pressure to meet any minimum attendance standard. The board has voted in favor of arranging for a regular technical/business session to be held at the Engineers' Club whenever an open date can be arranged.

We regret the death of member James C. Curtin. Mr. Curtin passed away on November 27. He was 61 years of age.

MINUTES OF CODE COMMITTEE MEETING #3

Present: Tom Campbell, Dick Glumac, Jim Breese
 Absent: Bob Braun, Bob Voelz, Mat Chikhale, Harjinder Ajmani
 Date: November 10, 1980

1. The committee members have reviewed the revision by UBC Fire & Life Committee of Chapter 1707 of UBC on Atriums. Apparently none of our recommendations have been adopted. However, Tom Campbell will take up the matter with Gus Degenkolb and report to the committee.
2. The next meeting is set for Monday, December 8, 1980, 2:30 PM at Glumac & Associates
3. Committee also started review of SF Building Code and has completed Chapter 1 of the code.
4. Dick Glumac's office will call all members early in the morning of the meeting to remind the members to attend the meeting.
5. Plan for next meeting: Review of SF Building Code, Chapters 2, 3, etc.

POINTS TO PONDER #4

Time is nature's way of keeping everything from happening at once. (Hufstader's Insight)
