



Western Air Conditioning Industries Association directors (standing l. to r.) Val Burke, President, Burke and Company, Larry Shea, President, Shea Equipment Company, and the Association president (seated left) Tom Brewer, President, California Hydronics Corp., beam with anticipation as Western Air Conditioning Exposition General chairman, Phil Freeman, reports of the tremendous advance interest and reservations of space at the big Western Air Conditioning Exposition, the first national show in this industry ever to be held on the Pacific Coast, which will take up the entire Civic Auditorium and Brooks Hall from January 19-22, 1970.

Freeman assures the directors of W.A.C.I.A., who are sponsoring the show, that it will be a memorable event and that the exhibit space at this time is very nearly sold out. Exhibitors already signed up will include a veritable "Who's Who" of the total

air conditioning and environmental control industries.

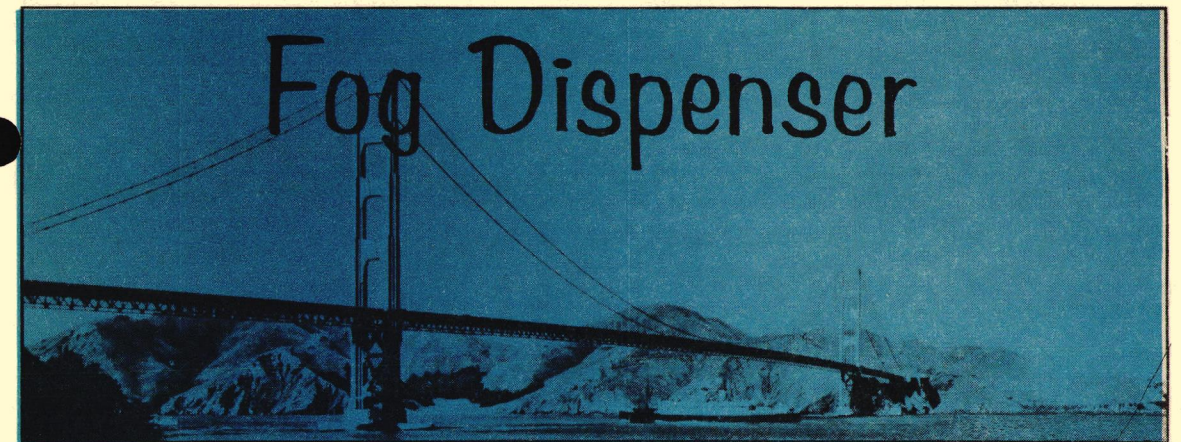
Invitational tickets to the Exposition may be obtained through any of the exhibitors, your A.S.H.R.A.E. Chapter officers, or the Exposition office, 77 Jack London Square, Oakland, Telephone: 451-7971.

The Exposition will operate free shuttle busses, during show hours, to and from the A.S.H.R.A.E. Convention Headquarters at the Hilton Hotel, the Exhibitor Hotels, the Del Webb's Towne House and the San Franciscan Hotel, and the Exposition in the Civic Auditorium and Brooks Hall.

The Show hours at the Exposition will be: Monday, January 19th and Tuesday the 20th, 10:00 a.m. to 6:00 p.m.; Wednesday the 21st, 2:00 p.m. to 10:00 p.m., and Thursday the 22nd, 10:00 a.m. to 5:00 p.m.

#### GOLDEN GATE CHAPTER ANNUAL SOCIAL DINNER DANCE

This year our SOCIAL PARTY will take place on January 19, 1970. The Dinner-Dance will be held concurrent with the National Meeting January 19th Dinner Party. The location will be the Kabuki Theatre in the Japanese Cultural Center. There will be Entertainment, an excellent Band and Dancing. The Committee on Entertainment has spared no effort to make sure the arrangements will afford everyone a pleasurable evening. The cost will be \$15.00 per person. Details will be found in the mailer you will be receiving very shortly. Please make your reservations early. See you at the Dinner-Dance on January 19, 1970.



GOLDEN GATE CHAPTER



ASHRAE

VOLUME XVIII - No. 12

JANUARY 1970

#### PROGRAM COMMITTEE CHAIRMAN - GEORGE N. ARONOVSKY

The next Golden Gate Chapter meeting will be held at the Engineer's Club, Hong Kong Bank Building, corner of Sansome and Pine Streets, San Francisco on Thursday night, January 8, 1969. Social hour will be at 5:30 PM and dinner at 6:45 PM

#### SUBJECT: 1970 ASHRAE Semi-Annual 'Kick-Off' Meeting

The 1970 ASHRAE Meeting will be the first National Meeting held in San Francisco in 15 years! The program for the evening will be presented by panelists. The remarks, in addition to information on the background of the 1970 San Francisco ASHRAE meeting and the status of the Exposition held concurrently with this National meeting, will be directed to the members and their wives and to Committee Chairmen regarding the responsibilities of each and what has to be done to make this meeting a success.

This will also be a LADIES night. Wives are requested to be present. The dinner rates for the wives will be at a reduced rate. We want the ladies to be present since so many will be involved with the hosting of the Meeting. And, for those ladies who have been wondering or curious about where we meet once a month, this is their chance to see the new and beautiful facilities of the Engineer's Club.

Again, bring yourself and be sure to also bring your wife.

The panelists are: Moderator: Dick Friedman, President; Joe Murray, 1970 Meeting General Chairman; Larry Shea, Past President; Tom White, Past President and Phil Freeman, WACE General Chairman.

#### JANUARY WORKSHOP

Chairman: Gene DeWree

#### SUBJECT: "GIRL MEETS BOY"

Location: downstairs near the bar. Wives are welcome and expected to participate with or without their escorts. This is an opportunity for everyone in the Chapter to become better acquainted prior to the WESTERN AIR CONDITIONING EXPOSITION. Session starts promptly at 5:45 P.M.

#### HONOR ROLL

THE L & H AIR COMPANY  
San Francisco, California 94105

507 Howard Street

Phone: 397-5494

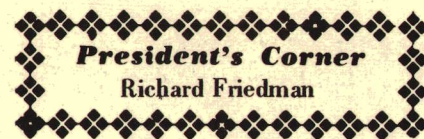
Published monthly by the Golden Gate Chapter of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, 1350 — 15th Avenue. San Francisco, California 94122. LO 6-2740.

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Charles Hardeman . . . . . Treasurer

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Richard Charles  
Carl Jordan  
Jack Palmer



**President's Corner**

Richard Friedman



The January 1970 National ASHRAE Semi-Annual Meeting is almost a reality. Having lived with the Meeting and Show from their inception, though I cannot take credit for either, inside me there is a paternal pride at seeing these events materialize from just an idea.

Each Chapter in Region X has been personally invited to attend and bring as many guests and interested associates as possible. However, the big responsibility for a successful meeting and Show still rests squarely on the shoulders of the Golden Gate Chapter Members. We must make a great last minute effort. Each member should find out what subject matter the symposiums, technical sessions and forums will cover and the times at which they will be presented. This will enable you to be present at those events which are of personal interest and bring an interested colleague. Apprise yourself of the Show schedule. Make definite arrangements to visit and bring a friend or an architect or a junior engineer or even a consulting engineer. If you are an employer give your employees time off to visit the show. They will appreciate it and you will never be sorry.

In addition to the technical sessions and the Show there are some exciting social events in which the Chapter has a large stake. The first is Monday night, January 19th at the Kabuki Restaurant for a dinner, floor show and dance. This will be the Chapter's Annual Social Event. It will be a delightful affair and a great way to entertain your customers. The second major event is the Banquet on Tuesday evening at the Hilton Hotel. This will be a dinner dance with Walt Tollefson's Orchestra. Mark both events on your calendar. A large attendance on both nights is essential in order to fulfill our commitments.

The Banquet for the semi-annual ASHRAE meeting to be held in San Francisco will be at the Hilton Hotel, January 20, 1970. Assemblyman John Knox will be our guest speaker, and Walt Tolleson will provide the dance music.

Tickets will be \$14.00 each or \$27.00 per couple. Tables will be arranged with ten seats. Those companies or offices wishing to reserve a table, please contact:

Arel W. Berrier  
Banquet Chairman  
1070 Bryant Street  
San Francisco, California  
Phone: 621-7417

**ADVANCEMENT IN MEMBERSHIP GRADE**

Requires neither fees nor references — just experience, education, or a P.E. License. We urge you to apply. Contact Arel Berrier, 621-7417.

**Know a prospective new member?**

Contact Gene Valerio at:

Air Filter/Control  
P.O. Box 787  
South San Francisco, California 94080  
Phone: (415) 871-6808

who will send him (her) application forms.

**MAIL OR PHONE NEWS TO:**

Editor, Fog Dispenser  
c/o L & H AIR-CO  
Attn: Tom Gilbertson  
507 Howard Street  
San Francisco, California 94105  
Phone: 397-5494

I couldn't complete the President's Column this month without expressing my pleasure over last month's meeting. In spite of the fact that the Fog Dispenser was late we had a fine turnout. The program was excellent, thanks to George Aronovsky, Jerry Howarth, John Hogan, Bob Montgomery, Ed Long and Bill Murphy. Last, but not least, for the first time this year we even held to our schedule.

A Happy, Healthy, Peaceful and Profitable New Year to all.

**MINUTES**

The meeting was held at the Engineer's Club, San Francisco. President Friedman called the meeting to order at 7:40 P.M. Members and Guests were introduced.

President Friedman apologized for the late Fog Dispenser. He said our printer, who is the best in the City, was swamped with extra work and could not get the December issue in the mail on time.

The minutes of the November meeting were approved as published in the Fog Dispenser.

Treasurer Charles Hardeman reported that the assets in the various accounts on November 30th were: Commercial \$1,965.95, General Fund Savings \$1,811.09, Workshop Fund Savings \$300.06, Research Fund Savings \$2,298.71.

A representative for Dick Charles accepted a plaque of appreciation from President Friedman for the excellent 1969 Seminar he presented.

Leo Dwyer, Cal Poly Workshop Chairman, explained the purpose of the Workshop and the qualifications for a student to be eligible for the Fund. He said the program is two-fold: It helps defray the cost of college education for students and it steers college graduates into our field. He urged all chapter members to donate generously in the 1970 Spring drive.

Gene Valerio, Membership Chairman, reported that since the beginning of the fiscal year, his committee has signed up 16 National members, 27 Golden Gate chapter members and 9 student members.

Sid Mackin of ACE WEST, speaking for Phil Freeman, reported on the progress of the Western Air Conditioning Exposition to be held concurrently with ASHRAE's 1970 Semi-annual Meeting

in San Francisco. He praised our Chapter for the high enthusiasm we have shown for the exposition and assured us that it will be a great show. Over 500 of the industry's major companies will be represented displaying equipment and techniques in Heating, Ventilating, Air Conditioning, Refrigeration, and Pollution Control.

Jos. Murray announced that the list of donors for the "Honor Roll" is almost depleted and that he would appreciate hearing of some new angels.

The photographer for Indoor Comfort News was present at the meeting. He took several pictures of Katherine Fitz, our charming female member, surrounded with many admiring male members. Katherine will be featured in a forthcoming issue of the Indoor Comfort News.

After a brief break, George Aronovsky, Program Chairman, introduced Jerry Howard of Kramer Trenton Co., moderator for the program. Jerry announced that the subject would be practical hints on DX refrigerant piping presented by experienced panelists.

John Hogan of Sporlan Valve Company, whose name was inadvertently omitted from the Fog Dispenser, presented slides covering piping problems, flow control devices, hot gas by-pass application and methods of head pressure control.

Robert Montgomery, consulting engineer, discussed oil return piping problems with refrigerants R12, R22 and R502 and gave practical applications of the double suction riser.

Edward Long of Honeywell, Inc., explained various controls for multi-zone equipment.

William Murphy of Power Refrigeration Co. told of special items he would like to see on the plans and specifications to reduce failures of refrigerant systems.

A lively question and answer period followed the discussion.

There being no further business, the meeting was adjourned at 10:00 P.M.

Irving Alger, Secretary

Air Conditioning Industries Association advised us that they would sponsor a products exposition in San Francisco to be held concurrent with ASHRAE Semi-Annual Meeting in San Francisco. Both ASHRAE and the public will benefit greatly from this exposition.

Tom White gave a brief outline of the programs and events planned for the Semi-Annual Meeting. He said that the meeting will culminate the Society's celebration of its 75th anniversary. Approximately 85 papers will be presented at the four Technical Sessions and 16 Symposiums during the four day Meeting. In addition there will be five Forums. He assured us that the meetings will be very rewarding and urged us to attend as many as possible.

Phil Freeman, WACE General Chairman, said that the Western Air Conditioning Exposition in San Francisco will be the largest exposition of its kind West of Chicago. Over 500 products of heating, ventilating, air conditioning, refrigeration, and air pollution equipment and techniques will be unveiled. He thanked all those who have worked hard with him to bring this exposition to San Francisco, and told us that it is very important for the exposition's success to have a large attendance on the first day.

Jos. Murray, 1970 Meeting General Chairman, was given a standing ovation when he stepped up to the podium. He thanked everyone for volunteering to serve on the various committees. Without the backing of all the members and their wives it would be very difficult to manage a meeting of this magnitude. Jos. discussed the special events which will be concurrent with the four day meeting. He also explained the responsibilities of each chairman, the duties of each committeeman and what has to be done to make this meeting a success.

There being no further business, the meeting was adjourned at 10:05 p.m.

Irving Alger, Secretary



GOLDEN GATE CHAPTER



ASHRAE

VOLUME XVIII – No. 13

FEBRUARY 1970

NOTE

No Pre-meeting Workshop because of Field Trip to Valley Sheet Metal. **PLEASE** re-address your reservation cards to Lowell Young at Valley – 1271 Evans Avenue, San Francisco so he can prepare for you. **DO NOT** send your reservation cards to the Engineers' Club for this meeting.

**PROGRAM COMMITTEE CHAIRMAN – GEORGE N. ARONOVSKY**

**SUBJECT: FIELD TRIP TO VALLEY SHEET METAL CO. INC.**

1271 Evans Avenue, San Francisco (Phone: VA 6-8877)

**TIME: 6:30 P.M.**

**(6:30 p.m. to 7:15 p.m. Cocktails – Dinner at 7:15)**

In line with our goal for diverse but interesting, informative and educational programs, the FEBRUARY 5 program will be a field trip to tour the sheet metal fabricating facility observing up to date equipment in operation at VALLEY SHEET METAL CO. INC. – one of the larger and progressive HV&AC Contractors in the Bay Area.

The program will consist of a presentation on the latest duct fabricating methods and other allied sheet metal products by hosting personnel and Mr. Alexander M. Scott, Director, Sheet Metal and Air Conditioning Institute as well as a guided tour of the operating machinery for observing sheet metal fabrication.

VALLEY SHEET METAL is hosting the drinks and dinner. However, members and guests may donate \$2.00. The funds thus raised will be used towards a Joe E. Murray memorial activity or other to be determined by the chapter.

Members of Engineering firms in particular are urged to attend this field trip which promises to be most enlightening.

Please mail your cards PROMPTLY (or call Valley Sheet Metal – VA 6-8877) to allow for adequate catering.

The evening Program Chairman is Lowell Young, Valley Sheet Metal Co., Inc.

**(See next page for directions)**

*HONOR ROLL*

**THE FARR COMPANY**

San Francisco, California 94124

1485 Bayshore Boulevard

Phone: 467-8616

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**NEWS ITEM**

The Peninsula Chapter of the California Society of Professional Engineers is host for CSPE at the 1970 joint annual meeting with the Nevada SPE at Tahoe on June 4 — 6, 1970 at the Sahara-Tahoe Hotel.

All engineers are invited to attend.

**For information contact:**

**Paul Edison Pulliom**  
**Director of Professional Relations**  
**Peninsular Chapter CSPE**  
**and**  
**Member**  
**Golden Gate Chapter**  
**ASHRAE**  
**Phone: 367-2742**

**ADVANCEMENT IN MEMBERSHIP GRADE**

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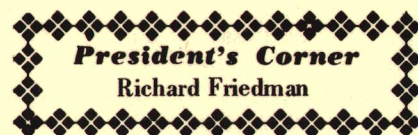
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**President's Corner**

**Richard Friedman**



I have just returned from the funeral service for Joe Murray. In attempting to write this column I feel inadequate to the task of properly eulogizing Joe. I did not have the opportunity to know Joe as well as many of you who will read these words. It was my pleasure to work closely with him on the preparations for the forthcoming Semi-Annual Meeting. He was a man who not only accepted responsibility but one who had the drive to follow each task through to completion. It is a tragedy that he did not live to see the fruits of his long hard labor for the Semi-Annual Meeting. His presence will be sorely missed next week and for many years to come. Joe was a vital and outstanding personality — never just another face in the crowd. He was taken from us suddenly and unexpectedly. I find myself unable to accept the reality of his passing. I know we will find a fitting way to honor his memory.

And now I hope it is not inappropriate to discuss some mundane matters of Chapter activities.

The January "kick-off" meeting was well received, so much so that some thought should be given to the possibility of inviting our wives to other Chapter meetings. Maybe we could alternate yearly with a Father and Son Night and a Husband and Wife Night.

The Seminar Committee plans to have its preliminary announcements on display at the Meeting and Show next week. Dick Glumac and his committee are in the process of obtaining some outstanding speakers to present the material on Codes. It is still not too late to offer suggestions.

Next week is our Big Event. The exhibitors are already assembling their wares in Brooks Hall and the Civic Auditorium. The National ASHRAE people will start arriving tomorrow. It will be gratifying to see our efforts materialize in an outstanding Meeting and Show which will be a fitting tribute to Joe Murray and the great 75th Birthday Party for ASHRAE.

Rest in Peace, Joe.

**MINUTES**

The meeting was held at the Engineer's Club, San Francisco. President Friedman called the meeting to order at 7:50 p.m. Members, wives and guests were introduced.

The minutes of the December 4th meeting were approved as published in the Fog Dispenser subject to correcting the spelling of Jerry Howarth's last name.

Treasurer Charles Hardeman reported that the assets in the various accounts on December 31st were: Commercial \$1,589.12, General Fund Savings \$1,811.09, Workshop Fund Savings \$300.06, Research Fund Savings \$2,298.71.

Membership Chairman Gene Valerio reported that since the beginning of the fiscal year, his committee has signed up 49 new chapter members and 15 new student members. He also said that commencing January 1 to the end of the fiscal year chapter dues for new members will be \$7.50.

Dick Charles reporting for Dick Glumac, Seminar Chairman, announced that the subject for the seminar this spring will be Codes with six sessions. Since many local codes have been revised in recent years, the seminar should be very informative to all.

Education Chairman, Jim Dana, reported that members of the Board of Governors who saw the preview of ASHRAE's film "Atmospheric Engineering" were favorably impressed and recommended that the film be shown at the Father-Son meeting in April.

After a brief break, the program was turned over to George Aronovsky. He announced that the annual social for this year will be held on January 20th in conjunction with the Banquet for the Semi-Annual Meeting. He also gave a resume of the meetings planned for the next few months, briefly:

**February:** Field trip to Valley Sheet Metal Co.  
**March:** Changes in Mechanical Codes  
**April:** Father-Son night with joint field trip with San Jose chapter to San Francisco Airport

The chapter was honored to have 49 wives present at the meeting. Because of the large turnout, it was suggested that a "Ladies Night" should be planned as a yearly event.

The subject for the evening was "Kick-off" for the 1970 ASHRAE Semi-Annual Meeting. The program was presented by panelist with President Dick Friedman moderator.

Larry Shea covered the history and frustrations of the many years of hard work by dedicated Chapter officers and members to bring a National Meeting to San Francisco. The last National Meeting held in San Francisco was 15 years ago! For several years we pleaded with National to sponsor a combined meeting and exposition; similar to the type presented in the East, but was turned down. Finally, in 1964, National agreed to sponsor a Semi-Annual Meeting in San Francisco in January 1970, providing we give up the idea of having an ASHRAE sponsored exposition. In 1967 Western

**DIRECTIONS FOR GETTING TO THE MEETING PLACE**

**When travelling SOUTHBOUND:**

Freeway 101 to Alemany Circle, back towards (easterly direction) INDUSTRIAL to OAKDALE, right at Oakdale to PHELPS (just before 3rd Street). Turn left on Phelps to FAIRFAX. Right at Fairfax, across 3rd Street to MENDELL. Turn left to Mendell to EVANS. Turn right at Evans to 1271 Evans.

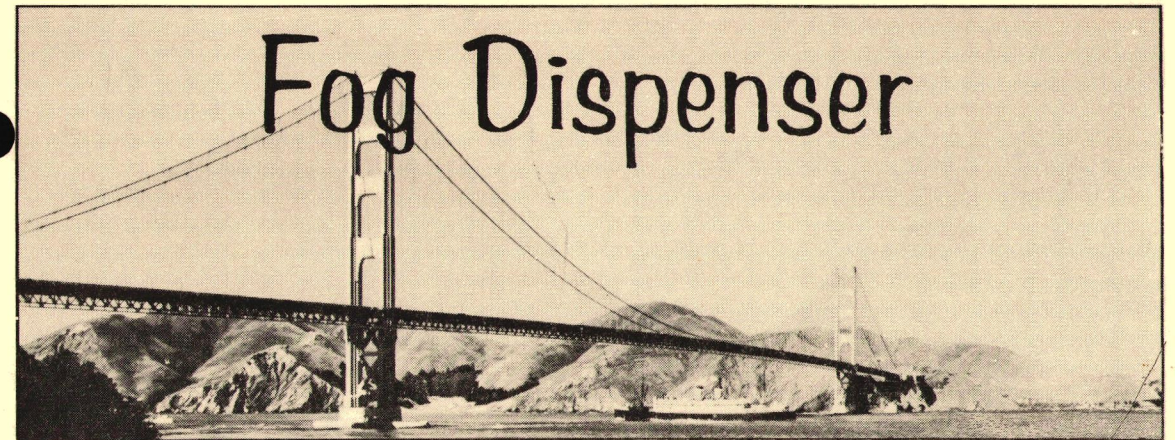
**When travelling NORTHBOUND:**

Freeway 101 to ARMY. Turn RIGHT at Army to EVANS. At stop light turn right on Evans to PHELPS. At Phelps, turn RIGHT to FAIRFAX (1 block). At Fairfax turn LEFT, cross 3rd Street to MENDELL. At Mendell turn LEFT to EVANS. At EVANS turn RIGHT to 1271 Evans.

1970 FOURTH ANNUAL ASHRAE  
TECHNICAL DEVELOPMENT SEMINAR

SESSION	DATE	PROGRAM
1	APRIL 7	A. Origin of Codes, Historical Outline B. Code Enforcement, Revisions, Variances C. Types of Building Occupancies D. Types of Building Constructions E. Relationships of C to D F. Question and Answer Period
	"INTRODUCTION"	
2	APRIL 14	A. Occupancy and Area Separation B. Fire Zones C. Fire Resistive Assemblies, Smoke, Fire Dampers D. Vertical Openings E. Smoke Dampers F. Required Locations of Dampers, Vertical Openings G. Quiz H. Question and Answer Period
	"FIRE PROTECTION IN HVAC SYSTEMS"	
3	APRIL 21	A. Territorial Applicability B. Ventilation and Air System Requirements C. Ducts, Vents, Combustion Air, Etc. D. Quiz E. Question and Answer Period
	"UNIFORM MECHANICAL CODES (UMC)"	
4	APRIL 28	A. Appliances and Equipment B. Fuel Oil and Gas Systems C. Industrial Systems, Garage and Kitchen Ventilation, Etc. D. Differences between UMC, City of San Francisco, and Other Major Codes E. Quiz F. Question and Answer Period
	"UNIFORM MECHANICAL CODES (UMC)"	
5	MAY 5	A. State of California, Title 8 B. Guarding of Equipment, Access C. Electrical Safety Orders D. Pressure Vessels, Relief Valves E. Quiz F. Question and Answer Period
	"SAFETY CODES"	
6	MAY 12	A. Refrigeration Codes B. Plumbing Codes Relating to HVAC Systems C. Latest Anti-Pollution Codes D. Examples of Very Odd and Unusual Cases E. Quiz F. Question and Answer Period
	"MISCELLANEOUS CODES"	

SPEAKERS TO BE ANNOUNCED AT A LATER DATE  
NOTE: DATES ARE TENTATIVE



GOLDEN GATE CHAPTER



ASHRAE

VOLUME XVIII - No. 14

MARCH 1970

PROGRAM COMMITTEE CHAIRMAN - GEORGE N. ARONOVSKY

The next Golden Gate Chapter meeting will be held at the Engineer's Club, Hong Kong Bank Building, corner of Sansome and Pine Streets, San Francisco on Thursday night, March 5, 1970. Social hour will be at 5:30 p.m. and dinner at 6:45 p.m.

SUBJECT: CODE CHANGES AND MECHANICAL SYSTEMS

The March Meeting will review Code changes as it relates to Mechanical Systems. In 1968 and 1969 there were extensive revisions to both the State Code and the City of San Francisco Code. Items such as boiler room enclosures, non-metallic ductwork, combustion air requirements, radiant heating requirements, UL listing on filters, dampers, etc. as well as controversial requirements on fire and smoke control constitute just a few of the major points changed in the Codes. This meeting is intended only to hit the highlights of these changes and is not intended to be inclusive or complete.

The Moderator of the program for the evening: **Larry Shea**, Shea Equipment Co.

The panel of experts will be:

- Tom Campbell** . . . . . Owens-Corning Fiberglass Corporation
- Ralph Carlson** . . . . . State Fire Marshall's Office
- Al Goldberg** . . . . . Superintendent, Bureau Building Inspection, S.F.
- Al Mockus** . . . . . Wonder Metal Products Company

Come, catch a code.

MARCH WORK SHOP  
Chairman: Gene DeWree

SUBJECT: THE 3 "P's" of HYDRONICS

Jack Palmer of California Hydronics Corporation will provide a provocative discussion of the Palmer Method.

Work Shop will start at 5:30 p.m. at the Engineer's Club upstairs in the area adjoining the dining room.

HONOR ROLL

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**APRIL MEETING**

**Field Trip with San Jose Chapter**

Golden Gate's regular April meeting will be a Father-Son (Daughter) Field trip in conjunction with our sister Chapter in San Jose. We will tour the United Air Lines Maintenance Facility in the Airport Shops Area, San Francisco International Airport.

The dinner will be served "airline style" for \$2.50 at 6:15 p.m. Thursday, April 2, 1970.

We will enter through the gate at Building 84 to be guided on our evening by Mr. Hecht of United Air Lines.

To enter this area use the "Airport Shops" off ramp from Bayshore Freeway and go through the main gate at Building 84, UAL. **DO NOT** go to the Main Terminal.

We only have a capacity to handle 250 persons so you will require confirmed reservations. Send your reservations to TOM GILBERTSON, L & H Air-Co., 507 Howard Street, San Francisco, California. It is suggested that this be done beginning at once — so you will receive your confirmation.

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Requires neither fees nor references — just experience, education, or a P.E. License. We urge you to apply. Contact Arel Berrier, 621-7417.

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**President's Corner  
Richard Friedman**



A decision has been rendered by all those in attendance at the Semi-Annual meeting and the ACE West Show. The verdict was unanimous, and Golden Gate Chapter Members can take pride as hosts for a fine meeting and show. The social events were well attended, the entertainment was top drawer, and the Chapter is still solvent. The hospitality room was well run and served as the focus for all activities. Registration for the meeting exceeded 1700, which was the highest ever for a Semi-Annual meeting not in conjunction with the International Exposition. Over 15,000 registrants attended the ACE West Show. All in all, it was an outstanding Chapter effort, proving again that San Francisco is still the city that "Knows How."

Last month, at our meeting hosted by Valley Sheet Metal, almost \$300 was donated to honor the memory of Joe Murray. The Board of Governors is soliciting ideas from the members for ways to use the money and to honor Joe.

Once a year the Chapters in each Region get together to discuss Chapter problems, Regional business, and to nominate Regional members for Regional offices. This year the Chapters' Regional Committee (CRC) will be hosted by Las Vegas April 14-16. Need I say more? — but I must! All members are invited, and an award called the "Man/Mile" trophy is presented to the Chapter whose combined attendance and distance from the host's city is the largest. I found the two CRC meetings which I attended as Chapter Delegate and Alternate to be enlightening and inspiring. The Southern Nevada Chapter which is the smallest in the Region, plans to go all out, and all of us who can make it should plan to attend and bring back the "Man/Mile" award.

Our March meeting, which is to be a panel discussion on Mechanical Code Changes, should whet everyone's appetite for an in-depth study of codes at our Spring Seminar. The time and location for the Seminar sessions will be finalized shortly. Keep your Tuesday evenings open in April and May.

The Chapter's addressograph plates and mailing lists have been re-vamped thanks to the efforts of Gene Valerio, Jack Palmer, and Carl Jordan. The changes effected should provide many dividends for the Chapter. Our present membership is up to 369. There are an additional 162 national members coded to our Chapter. These national members will not be added to our mailing lists for Golden Gate Chapter dues solicitation, and some complimentary Fog Dispenser copies.

**MINUTES**

The meeting was held at Valley Sheet Metal Co., San Francisco. President Friedman called the meeting to order at 8:10 p.m. It was agreed to dispense with the customary introduction of members and guests due to unusual background noises.

President Friedman asked all present to rise in silent prayer to honor the passing of Joe Murray.

The minutes of the January 7th meeting were approved as published in the Fog Dispenser.

Gene DeWree was thanked for his excellent choice of Pre-meeting Workshop subjects.

It was requested that all members support the 1970 Cal Poly Workshop program giving assistance to qualified engineering students. Mail your pledges to Leo Dwyer before March 31, 1970.

Dick Glumac will mail notices and details of our Spring Seminar on "Codes" to all members in the near future. Send in your reservations early, as a large turnout is expected.

President Friedman announced that the 1970 Semi-Annual Meeting in San Francisco was a great success. More than 1700 members and guests registered. He thanked all committee men and their wives for their dedicated services. President Friedman also said that the concurrent Western Air Conditioning Exposition in San Francisco was a tremendous success. The attendance exceeded 15,000.

It was announced that the Bay Area Engineer's Week will be the week of February 22nd. For luncheon and dinner reservations, contact Bob Voelz.

George Aronovsky gave a resume of the meetings planned for the remainder of the fiscal year, briefly:

**March:** Changes in Mechanical Codes  
**April:** Father-Son night with joint field trip with San Jose Chapter to San Francisco Airport  
**May:** Computer Application  
**June:** Air Pollution Control

Lowell Young of Valley Sheet Metal Co., Inc. and Program Chairman for the evening introduced Mr. Charles Andrews and Ed Salamone, partners of Valley Sheet Metal Co., Inc.

Mr. Alexander Scott, director of Sheet Metal and Air Conditioning Institute, outlined the history of SMACNA and informed us that there are eight SMACNA Manuals currently in use, namely:

- Architectural Sheet Metal
- Architectural Sheet Metal Specifications
- Low Velocity — Duct Construction
- High Velocity — Duct Construction
- Fibrous Glass Construction — Ducts
- Air Handling Specifications
- Balancing & Adjustment of Air Dist. Systems
- Fire Dampers

Mr. Charles Andrews described the sheet metal fabricating facility of Valley Sheet Metal saying that they used the latest duct fabricating methods. After his presentation, the members and guests were conducted on a guided tour to observe the operation of a modern sheet metal plant.

There being no further business, the meeting was adjourned at 9:45 p.m.

Irving Alger, Secretary

**'CODE' TOPIC OF 4TH ANNUAL TECHNICAL SEMINAR**

A Technical Development Seminar, consisting of a series of six programs conducted by experts in the selected field, will again be sponsored by the Golden Gate Chapter during 1970.

This series of programs will cover codes and regulations as they apply to different buildings, systems and equipment in construction industry in different regions of the country. The emphasis will be given to the San Francisco Bay Area and State of California.

**WHEN (Tentative Schedule)**

The first program will be held Tuesday, April 7, 1970 from 6:30 p.m. to 9:30 p.m., and each succeeding Tuesday thereafter through May 12, 1970 at the same hours.

**WHERE:** To be announced at a later date.

**FEE:** Between \$20.00 to \$30.00. Exact fee shall be announced at a later date.

**PRE-REGISTRATION:** If you wish to receive final announcement and enrollment card, please enter your name and address in the mailing roster.

Should you wish more information, please call any one of the following committee members:

Dick Glumac, Chairman — 982-4370  
Richard Charles — 434-2720

Mac Takahashi — 981-1555  
Dick Gee — 764-7598

Tom Campbell — 296-2525

A certificate of completion will be given to those who attend four of the six sessions. A 3-ring binder shall be provided for each student. The binder will include the outline of each lecture. The remainder of the binder can be used for filing your own notes for future reference.

Charles Hardeman said that to date only 24 members have sent in donations to Leo Dwyer for the Cal Poly Workship Fund. Please send your pledge or check to Leo Dwyer promptly.

After a short break, the meeting was turned over to Larry Shea, who was Moderator for the program "Code Changes as it Relates to Mechanical Systems." In 1968 and 1969, there were extensive revisions to both the State Code and the City of San Francisco Code. In general both codes are patterned after the current Uniform Mechanical Code - but there are many exceptions. The following four expert panelists presented us with their views of these changes and differences:

Ralph Carlson of the State Fire Marshall's Office briefly covered the changes and improvements in the new California Administrative Code, Title 24. He emphasized that the requirements of the State Code are minimal standards and that in some cities, the local code will govern.

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Tom Campbell of Owens-Corning Fiberglass Corporation pointed out the similarities and differences of the three major codes in the Bay Area, namely, Uniform Mechanical Code, San Francisco Building Code and the California Administrative Code. Tom said that all three codes are similar, but also very different. He thought that most of the differences were minor in principle and strongly recommends that the codes be revised to correct these variations.

Al Mockus of Wonder Metal Products informed us of the effects of the new codes on air distribution systems. The controversial requirements of fire and smoke control will constitute the greatest headaches for all concerned.

A lively question and answer period followed the discussion.

There being no further business, the meeting was adjourned at 10:25 P.M.

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GOLDEN GATE CHAPTER



ASHRAE

VOLUME XVIII-No. 15

APRIL 1970

PROGRAM COMMITTEE CHAIRMAN - GEORGE N. ARONOVSKY

PROGRAM

*Golden Gate - San Jose Joint Meeting  
Father-Son Field Trip to United Air Lines  
San Francisco Operations Maintenance Base  
April 2, 1970, at 6:15 P.M.*

The next meeting of the Golden Gate Chapter will be at the United Air Lines Maintenance Base. Take the "Airport Shops" off ramp from the Bayshore Freeway" and enter through the main gate. Mr. Hecht of UAL will direct us to an "airline style" dinner at 6:15 P.M., after which we will tour the facility.

You will require confirmed reservations as we only have room for 250 people. As of this moment we have 190 confirmed reservations. ONLY telephone reservations will be accepted from now on.

To make a reservation - if any room still exists - call TOM GILBERTSON at L&M AIR CO., 397-5495.

HONOR ROLL

THE HESS GRIENER & POLLAND COMPANY  
1485 Bayshore Boulevard, San Francisco, California  
Telephone: 467-1321

## PRESIDENT'S MESSAGE

ASHRAE has three major events scheduled for April.

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*Richard Friedman*

Secondly, the Region X Chapter's Regional Conference (CRC) opens in Las Vegas April 16th for the golfers with the ASHRAE business starting Friday, April 17th at 1:00 P.M. Region X strongly supported the Golden Gate Chapter in our efforts to present a fine Semi-Annual Meeting. Let's turn out and bring back the Man Mile Award to San Francisco. Our Delegate and Alternate are George Aronovsky and Irving Alger, respectively.

The third event is our joint meeting with the San Jose Chapter on Thursday, April 2nd at the United Airlines Maintenance Facility at the San Francisco International Airport. This is a father and son (daughter) affair and it seems an excellent program choice in its interest for young and old alike.

In Joe Murray's memory the Board of Governors has decided to purchase a much needed speaker's stand and present it to the Engineer's Club. It will [redacted] a plaque to honor Joe.

The Nominating Committee has submitted its recommendations for Officers and Directors of the Golden Gate Chapter for the 1970-1971 fiscal year. Nominations will be open to the floor at the April meeting. Ballots will then be sent out and counted with the results made known at our regular May meeting.

## MINUTES

The meeting was held at the Engineer's Club, San Francisco. Acting President George Aronovsky called the meeting to order at 7:45 P.M. Members and guests were introduced.

The minutes of the February 5th meeting were approved as published in the Fog Dispenser.

Aronovsky called to our attention that the word "not" in the last sentence of the President's Corner column in the March issue of the Fog Dispenser should read "now."

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Dick Glumac announced that the program and tentative dates for the 1970 Technical Development Seminar on Codes are included on the last page of the March Fog Dispenser. All members will receive, shortly, in the mail a complete description of the Seminar and registration cards.

Gene DeWree thanked Jack Palmer for his discussion of "The 3 P's" of Hydronics" at the March Work Shop. He said there would not be an April Work Shop. The subject of the May Work Shop will be "How to Keep the Pressure Down."

Tom Gilbertson announced that the April Meeting Field Trip with San Jose Chapter to the Airport is fully explained in the last Fog Dispenser. He advised that all members who wish to attend to please confirm their reservations early since the airport tour has capacity to handle only 250 persons.

Treasurer Charles Hardeman reported that the assets in the various accounts [redacted] February 28th were: Commercial \$1,955.26, General Fund Savings \$1,829.20 Workshop Fund Savings \$303.06, Research Fund Savings \$2,321.70.

Bob Voelz, Chairman of Nominating Committee, said that his committee recommends the following sample ballot for the Officers and Board of Governors for 1970-71.

## OFFICERS

George Aronovsky...President  
Irving Alger.....Vice President  
Charles Hardeman...Secretary  
Lewis Pollock.....Treasurer

- (1) 1 year of remaining 2-year term.  
(2) 2 year term.

## BOARD OF GOVERNORS

Richard Friedman  
Richard Charles (1)  
Carl Jordan (1)  
Jack Palmer (2)  
Richard Gee (2)

Additional nominations can be made from the floor at the April meeting.

Administrative Code. Tom said that all three codes are similar, but also very different. He thought that most of the differences were minor in principle and strongly recommends that the codes be revised to correct these variations.

Al Mockus of Wonder Metal Products informed us of the effects of the new codes on air distribution systems. The controversial requirements of fire and smoke control will constitute the greatest headaches for all concerned.

A lively question and answer period followed the discussion.

There being no further business, the meeting was adjourned at 10:25 P.M.

Irving Alger, Secretary

**MARCH ATTENDANCE**

**Guests**

- |                   |                        |
|-------------------|------------------------|
| Hal B. Toomey     | Powers Regulator       |
| Bob McGregor      | Pacific Telephone      |
| Dan Brown         | Chas. A. Gillet Co.    |
| Don McClelland    | Westinghouse           |
| Don Huffine       | AHK                    |
| Dick Byers        | Meacon Services        |
| Watsu Takahashi   | Ayers, Cohen, Hayakawa |
| Ed Kenny          | S.M.W.T.A., No. 104    |
| Al Mockus         | Wonder Metal Prod.     |
| Ralph E. Carlson  | State Fire Marshal     |
| A. Soliberg       | Building Inspector     |
| Wm. Ward          | Climate Cond. Corp.    |
| Siegfried Munding | Aladdin Heating Corp.  |

**Members**

- |                     |                            |
|---------------------|----------------------------|
| Dick Charles        | Charles & Braun            |
| Malcolm C. Sullivan | Corps of Eng.              |
| Walt Schneider      | Charles & Braun            |
| Ed Merino           | Dunham-Bush, Inc.          |
| P. H. Johnson       | G. L. Gendler & Assoc.     |
| Steve Sprague       | Charles & Braun            |
| Ted Georgiou        | Climatrol Ind.             |
| Marlin Whitney      | Vann Engineering           |
| Bob Swezey          | Air Filter/Control         |
| Bob Judd            | Montgomery & Roberts       |
| Bob Lincoln         | Vann Engineering           |
| Art Gamble          | Robertshaw Controls        |
| Andy Feiner         | Tempco Equip. Co. Inc.     |
| Sam Yamauchi        | G.L. Gendler & Assoc. Inc. |
| Bob Wishort         | Belden & Wishort           |
| Max Wolff           | Dill & Sederberg           |
| Jim Breese          | Gillet Co.                 |
| Carson Woo          | Bonelli Young Wong & Biggs |
| Donald L. Williams  | Donald L. Williams         |
| C. D. Williams      | Sheet Metal Ind.           |
| Dick Porter         | Powers Reg.                |
| Jim Parsons         | Pacific Telephone          |
| John Capitolo       | Johns Manville             |
| Charles A. Gillet   | Chas. A. Gillet Co.        |
| K.T. Belotelkin     | K.T. Belotelkin & Assoc.   |
| Ben Mendoza         | Dunham-Bush Inc.           |
| Fred Farmer         | Dunham-Bush Inc.           |
| John Werner         | Trane Co.                  |
| Gus Gendler         | G.L. Gendler Assoc.        |

- Clyde Wilson-Reid  
 Ken Lloyd  
 Bob Phillips  
 Bob Anderson  
 Cal Laws  
 Don Stock  
 Ed Collins  
 Dick M. Glumac  
 Klaus D. Kramer  
 Dart Renefort  
 Tom Douglass  
 Tom White  
 D. H. Fujioka  
 H.E. Deady  
 Al Scavino  
 Ed Akizuki  
 Richard E. Gee  
 Katherine B. Fitz  
 E. Carrin  
 W. Wishard  
 Joe Gardner  
 Mike Grimes  
 Jim Witharm  
 Carl Landers  
 Jack A. Palmer  
 Bruce Meyer  
 Mike Reichlin  
 Art Giapponi  
 Jim Williams  
 Mike Bekedam  
 Lyle Schuelke  
 D.G. Burr  
 Mike Cory  
 Norman V. Heather  
 David Hara  
 Bob Tuck  
 Karl Baldwin  
 Lewis S. Pollock  
 C.S. Hardeman  
 George N. Aronovsky  
 Irving Alger  
 Carl H. Jordan  
 L. Shea  
 T. Campbell  
 Lee Bedaro  
 Tom Gilbertson  
 Alan E. Miller  
 Helmut Sommer  
 Gene DeWree  
 Max C. Reefer  
 Sid Chappell  
 Jim Curtin  
 Pete Knezeuch  
 Jon Higashioka  
 C. Stuart Malcolm  
 K. Witmann  
 Dale J. Missimer  
 Charles McLaughlin

- Clyde Equipment Co. Inc.  
 Barber Colman  
 Bob Phillips  
 Pameco Aire  
 Simpson Stratta & Assoc.  
 Simpson Stratta & Assoc.  
 Safeway Stores, Inc.  
 Buonaciossi & Assoc.  
 Buonaciossi & Assoc.  
 Carrier A/C Co.  
 Douglass Insulation  
 American Blower  
 Rogers Eng. Co.  
 Rogers Eng. Co.  
 Eng. Air Systems  
 AHK  
 Bechtel Corp.  
 Bechtel Corp.  
 Bechtel Corp.  
 Dunham Bush  
 Aladdin  
 N.S. Wright  
 Fraser & Johnston Co.  
 Trane Co.  
 Calif. Hydronics Corp.  
 Wm. Brobeck & Assoc.  
 Pacific Pumping Co.  
 Pacific Pumping Co.  
 Industrial Steam  
 Industrial Steam  
 L.O. Schuelke Co., Inc.  
 Grennell Co.  
 Vann Engr.  
 N.V. Heather Inc.  
 Tuttle & Bailey  
 Tuttle & Bailey  
 Bechtel Corp.  
 Trane Co.  
 C.S. Hardeman  
 Aronovsky & Assoc.  
 GM & TR Simonson  
 G.L. Gendler & Assoc.  
 Shea Equipment Co.  
 Owens-Corning  
 Dinwiddie Const. Co.  
 L & M Air-Co.  
 Burke & Company  
 Kasin, Guttman & Assoc.  
 Associated Process Controls  
 Comm. Air  
 Kaiser Foundation  
 Lockheed  
 Combustion Utility  
 Higash Assoc.  
 Kasin, Guttman & Assoc. Nat'l.  
 Kasin, Guttman & Assoc. Nat'l.  
 C-M/H. Koch & Sons  
 American Std.



GOLDEN GATE CHAPTER



ASHRAE

VOLUME XVIII — No. 15

APRIL 1970

PROGRAM COMMITTEE CHAIRMAN — GEORGE N. ARONOVSKY

**PROGRAM**

**Golden Gate — San Jose Joint Meeting**  
**Father-Son Field Trip to United Air Lines**  
**San Francisco Operations**  
**Maintenance Base**  
**6:15 P.M.**  
**April 2, 1970**

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Phone: 467-1321

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1969 — 1970**

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George N. Aronovsky . . . Vice President  
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Charles Hardeman . . . . . Treasurer

**BOARD OF GOVERNORS**

G. Robert Voelz  
Lewis S. Pollock  
Richard Charles  
Carl Jordan  
Jack Palmer

**President's Corner**  
Richard Friedman



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(Continued)

**TECH SEMINAR**

**BEGINS**

**APRIL 7, 1970**

**ADVANCEMENT IN MEMBERSHIP GRADE**

Requires neither fees nor references — just experience, education, or a P.E. License. We urge you to apply. Contact Arel Berrier, 621-7417.

**Know a prospective new member?**

**Contact Gene Valerio at:**

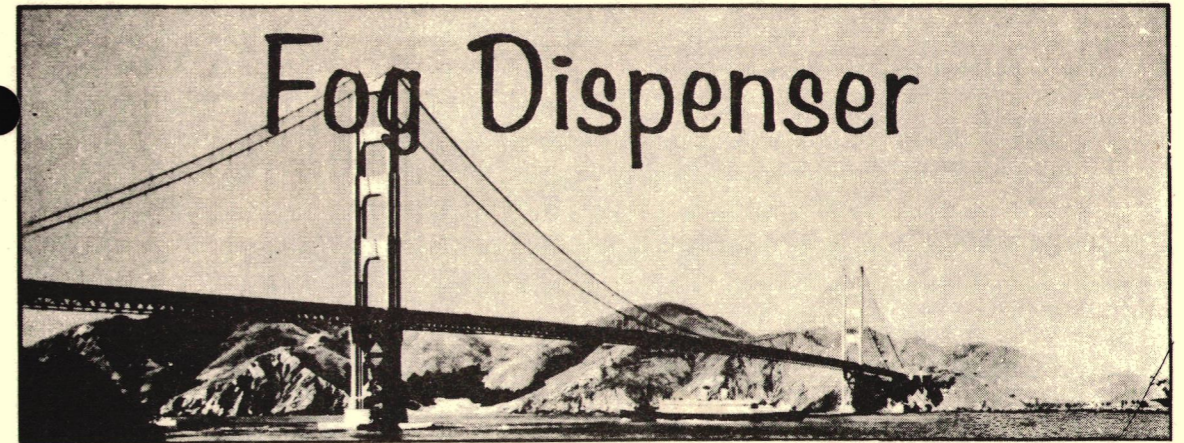
**Air Filter/Control  
P.O. Box 787**

**South San Francisco, California 94080  
Phone: (415) 871-6808**

who will send him (her) application forms.

**MAIL OR PHONE NEWS TO:**

Editor, Fog Dispenser  
c/o L & H AIR-CO  
Attn: Tom Gilbertson  
507 Howard Street  
San Francisco, California 94105  
Phone: 397-5494



GOLDEN GATE CHAPTER



ASHRAE

VOLUME XVIII – No. 16

MAY 1970

**PROGRAM COMMITTEE CHAIRMAN – GEORGE ARONOVSKY**

The next Golden Gate Chapter meeting will be held at the Engineer's Club, Hong Kong Bank Building, corner of Sansome and Pine Streets, San Francisco on Thursday night, May 7, 1970. Social hour will be at 5:30 PM and dinner at 6:45 PM.

**SUBJECT: COMPUTER APPLICATION FOR OUR INDUSTRIES TODAY**

The meeting will consist of a panel discussion covering the usage of computers for the calculation of loads, the selection of equipment, the making of analyses, and many other aspects.

The panel will consist of: Moderator, Richard Charles of Charles & Braun; W. Dart Rinefort, Carrier; Donald O. McClelland, Jr., Westinghouse; Lewis Pollock, Trane Co.; Zulfikar Cumali, Consultants Computation Bureau.

*HONOR ROLL*

**THE JOHNSON SERVICE COMPANY**

165 – 13th Street

San Francisco, California

Phone: UN-1-6353

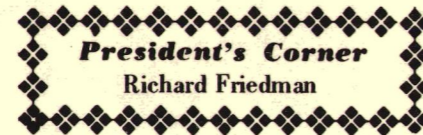
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Lewis S. Pollock  
Richard Charles  
Carl Jordan  
Jack Palmer



The Spring Seminar opened Tuesday night, April 7th to an enthusiastic audience. This year for the first time we are offering the option of attending individual sessions at \$5.00 each. Thus our final accounting will be delayed until the completion of our last meeting in May. We are fortunate in having obtained all of our first choice speakers to discuss the various aspects of Codes, so please plan to attend. Your donations will be warmly received.

The Golden Gate ASHRAE Cal Poly Workshop has collected about 50% of its goal for this year. Another mailing will be sent out soon requesting your participation. I can think of no more worthy cause for donation than to help to ease an air-conditioning student's financial burden.

Last month's joint meeting with the San Jose Chapter at the United Air Line's maintenance shops broke all records for attendance. Next year let's try to remember how enjoyable this type of meeting was for all who attended.

By the time you read this column the 1970 Roster, together with the revised by-laws, should be in the mail. We apologize for the delay and intend to initiate our new Roster printing schedule next year. The 1970-1971 Roster should be printed and ready for distribution by October 1970.

WACIA, the sponsoring group for the Western Air Conditioning Exposition, has announced that it will present a check for \$35,000.00 to National ASHRAE Research at the CRC meeting in Las Vegas. This donation is being made on behalf of the individual Chapters in Region X. Credit will be given to each Chapter proportional to its paid membership as of March 30th. WACIA has additional funds which it intends to disburse over the next two years for worthy educational and research activities within Region X. Ideas for such activities should be submitted through the Board of Governors.

MINUTES

A joint meeting with San Jose Chapter was held at the cafeteria of the United Air Lines Maintenance Base. President Richard Friedman called the meeting to order at 7:20 PM.

The minutes of March 5th meeting were approved as published in the Fog Dispenser.

Friedman announced that in memory of Joe Murray the Board of Governors decided to purchase a much needed speaker's stand and present it to the Engineer's Club. It will bear a plaque to honor Joe. The stand will be purchased from the funds donated to Joe at the Valley Sheet Metal Meeting. All money left over will be donated to the Heart Fund.

Friedman explained the purpose of the Chapter Regional Committee Meeting (CRC) to be held in Las Vegas next month. He said that participating in CRC meetings is a rewarding experience and urged each member to attend if possible.

Friedman asked if there were any additional nominations to be added to 1970-71 slate of Board of Governors recommended by the Nominating Committee. There being none, it was moved and seconded that the nominations be closed.

Friedman announced that the Annual Technical Development Seminar on Codes will be held at the new PG&E Auditorium. The first of six consecutive weekly sessions is scheduled for April 7th.

George Aronovsky introduced Dick Charles who announced that our next meeting will be on computer application to our industry.

There being no further business, the business portion of the meeting was adjourned at 7:30 PM.

San Jose Chapter's meeting followed.

Mr. Hecht of UAL was introduced and he described the various services performed at the United Airline Maintenance Base. Afterwards eighteen well informed UAL guides escorted parties of about twelve through the maintenance base. The San Francisco base is their largest and most complete.

Irving Alger, Secretary

**OF COURSE** we have equal rights for women — here is **OUR** lady member.

She is not only "equal" but probably "base bid".



**KATHERINE FITZ**, Bechtel Corp. engineer, is the only female member of the 360-member Golden Gate chapter of the American Society of Heating, Refrigerating & Air-Conditioning Engineers.

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c/o L & H AIR-CO  
Attn: Tom Gilbertson  
507 Howard Street  
San Francisco, California 94105  
Phone: 397-5494

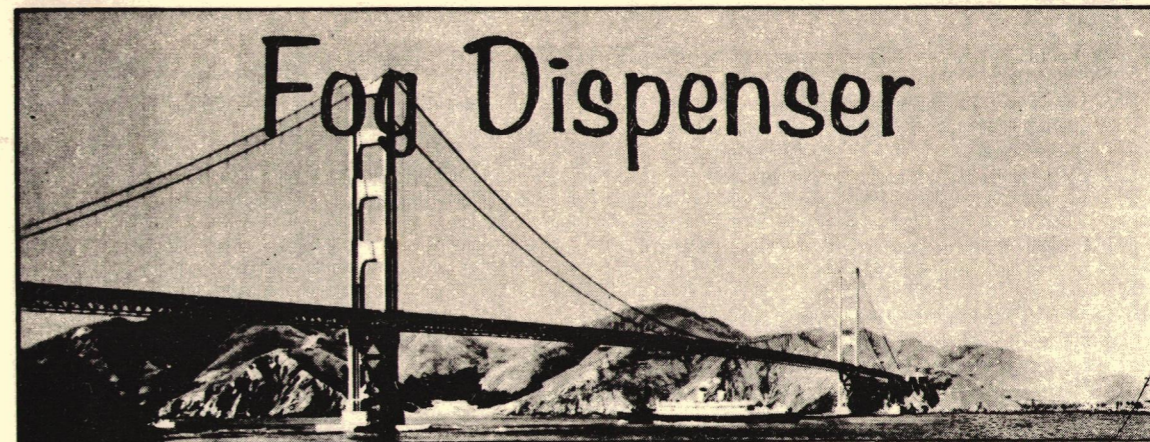
## MEMBER ATTENDANCE

Marlin Whitney	Vann Engineering	Tom Conroy	Clyde Equipment Co. Inc.
Bob Lincoln	Vann Engineering	Max Wolff	Dill & Sederberg
Bob Swezey	Air Filter/Control	Gus Gendler	G.L. Gendler & Assoc.
Ed Leedom	Air Filter Sales	K. Watson	Kalin, Watson
Ross M. Sherrill	E.B. Ward & Co.	Carl Frost	American Standard Raco
Klaus D. Kramer	Buonacoss & Assoc.	Ed Merino	Dunham-Bush, Inc.
Mike Grimes	Norman S. Wright Co.	Maurice Laks	G.L. Gendler & Assoc.
Keith Lescure	A.R. Peterson	Ben Mendoza	Dunham-Bush, Inc.
Ted Georgion	Climatrol	Robert S. Walker	Clyde Equipment Co., Inc.
Fred Vann	Vann Engineering	Jim Plakos	Hess, Greiner & Polland
Mike Cort	Vann Engineering	Dale J. Missimer	Conrad-Missimer/H. Koch & Sons
Andy Feiner	Tempco Equipment Co.	Alexander Bien	Philco-Ford Corp.
John Busch	A. R. & B.	Richard A. Charles	Charles & Braun
Carl Landers	Trane Company	Dart Rinefort	Carrier A/C
Norman T.R. Heathorn	N.V. Heathorn, Inc.	Jack A. Palmer	Calif. Hydronics Co.
Ray Wolford	Materials Survey Assoc. Inc.	Lewis S. Pollock	Trane Co.
Laurie D. Ingram	Materials Survey Assoc. Inc.	C.S. Hardeman	C.S. Hardeman, Inc.
John Brose	The Brose Co.	Donald O. McClelland, Jr.	Westinghouse
Al Scavino	Engineered Air Systems	Dick Friedman	Engineered Air
Dave Hara	Tuttle & Bailey	George N. Aronovsky	Aronovsky & Assoc.
Jim Dana	G.M. Cooke Sales	Irving Alger	GM & TR Simonson
Ward L. Clark	Marley Co.	Z.O. Cumali	Consultants Computation Bureau
F.M. Palacios	P.O.D. Plant Maint.	Per Sonander	Skidmore Owings & Merrill
Frank Olsen	Frank Olsen Co.	Alan E. Miller	Burke and Company
C.S. Malcolm	Kasin, Guttman & Assoc.	Max C. Reefer	Comm. Air
Tom Higashioka	Higash Assoc.	Chuck McLaughlin	American Standard
D.H. Fujioka	Rogers Engr. Co.	Robert Phillips	Consulting Engr.
Gene Valerio	Air Filter/Control	Helen Wagner	Kasin, Guttman & Assoc.
Steve Wei	P.B.O. & D. Inc. Engrs.	Ronald R. Ross	Aide Design Consultant
Cal Laws	Simpson Stratta	Walt Wishard	Dunham-Bush, Inc.
Sam Yamavera	G.L. Gendler	Wm. C. Bulkeley	Lillard Co.
Howard Friesen	G.J. Yamas Co.	Tom White	American Standard
Sig Kulka	Fairchild Semiconductor	W.F. McClellan	The McClellan Co.
Tom Campbell	Owens Corning Fiberglas	Tom Gilbertson	L & H Air-Co.
Wei Lin Hsia	Bentley Engineers	Pete T. Marsh	Powers Reg. Co.
Milo Sands	Kaiser Engineers	E. Carrier	Bechtel
Ed Collins	Safeway Stores, Inc.	Nina Damm	Bechtel
Fred Farmer	Dunham-Bush	R.A. DeChene	US L
Robert L. Warren	So. Grey Sheet Metal	Larry Sturtz	DMJM

## ROSTER

Your new, very excellent Rosters are now in your hands — many thanks to Al Scavino.

If members are aware of any changes they should mail these directly to the Fog Dispenser Editor. A monthly up-date list for cutting and pasting into the Roster will be published.



GOLDEN GATE CHAPTER



ASHRAE

VOLUME XVIII — No. 17

JUNE 1970

## PROGRAM COMMITTEE CHAIRMAN — GEORGE ARONOVSKY

The next Golden Gate Chapter meeting will be held at the Engineer's Club, Hong Kong Bank Building, corner of Sansome and Pine Streets, San Francisco on Thursday night, June 4, 1970. Social hour will be at 5:30 PM and dinner at 6:45 PM.

## SUBJECT: Air Pollution — Stationary and Vehicular Sources

We are very fortunate to have as the speaker for the evening, Professor Caretto currently an assistant professor in the Department of Mechanical Engineering, Thermal Systems Division at the University of California at Berkeley where he is engaged in research on combustion and vehicle emissions. Professor Caretto received his Ph.S. from UCLA in 1965. While at UCLA his research work was concerned with catalysis studies for air pollution control.

The talk will concern itself with the production of undesirable pollutants in urban atmospheres due to both automotive and other sources, differences between different geographical areas will be pointed out as well as the progress to date in air pollution control and proposals for the future.

The talk will be followed by a question and answer period. The program will be stimulating, informative, educational and a must for all to attend.

This evening will also be the last general meeting and program for the 1969-1970 year. It will also be the evening for the installation of the elected incoming officers. All members are urged to plan to attend this final get-together. Members are urged to bring guests.

## HONOR ROLL

THE CALIFORNIA HYDRONICS CORPORATION

630 Bryant Street

San Francisco, California

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Published monthly by the Golden Gate Chapter of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, 1350 — 15th Avenue. San Francisco, California 94122. LO 6-2740.

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**REMINDER**

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**Please send your check this month.**

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Requires neither fees nor references — just experience, education, or a P.E. License. We urge you to apply. Contact Arel Berrier, 621-7417.

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Contact Gene Valerio at:

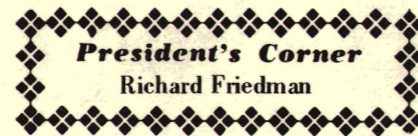
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who will send him (her) application forms.

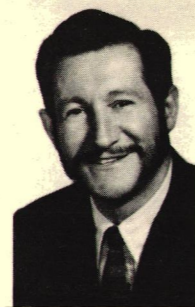
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Attn: Tom Gilbertson  
507 Howard Street  
San Francisco, California 94105  
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**President's Corner**

**Richard Friedman**



The President's last month in office must always be a time of reflection on the past and contemplation of the future.

The highlight of this past year has to be our hosting of the Semi-Annual Meeting in January and the ACE West Show which ran concurrently. Both events were successful, thanks to the efforts of the Golden Gate Chapter Members. It is difficult to single out individuals in a group effort but two must be mentioned — our General Chairman, the late Joe Murray and his assistant, Tom White. Tom did a superb job when he took over the General Chairmanship after Joe's untimely passing. The Chapter received many justly deserved compliments from individual members, chapters and national officers.

I would be remiss in reflecting on the highlights of this past year without mentioning the personal satisfaction derived from the close working relationship with the Board of Governors. It is a good feeling for all of us in ASHRAE to know that there seems to be no end to the number of members willing to volunteer their time to achieve a finer Chapter. I hope that all of you will join me in publicly thanking Bob Voelz for his many years of service to the Chapter. His services on the Board will be sorely missed.

Our usual Chapter Activities functioned well this year in spite of the extra participation in the Semi-Annual Meeting. The Chapter's standing committees all lived up to and in many cases exceeded the standards established over the years. My personal thanks to each of the Committee Chairmen for his services and also for the written reports which will make for a much smoother and more efficient transition under new leadership next year.

Our monthly meetings were well attended, thanks to the thoughtful programming of George Aronovsky.

Few members are aware of the magnitude of preparation required to produce a successful Technical Seminar. We are all deeply indebted to Dick Glumac and his Committee for a job well done.

Gene Valerio displayed his administrative and selling skills by increasing our Chapter membership to 375.

Tom Gilbertson, our Fog Dispenser Editor; Al Scavino, the Roster Chairman; Dick Porter, Attendance and Reception; Gene DeWree, Pre-meeting Workshop; Jim Dana, Education Committee and Leo Dwyer, Cal Poly Workshop. All deserve public recognition. If I have forgotten anyone else, forgive me, the list goes on and on. With men like this to serve, the Chapter's future is in good hands.

In closing, let me thank each of you for having made this year as President possible.

**MINUTES**

The meeting was held at the Engineer's Club, San Francisco. President Friedman called the meeting to order at 7:35 p.m. Members and guests were introduced.

The minutes of the April 2nd meeting were approved as published in the Fog Dispenser.

Friedman announced that the new Roster had been printed and that each member would receive his copy in the mail next week.

Friedman thanked Dick Glumac, who was absent, for his efforts in chairing the excellent 1970 Seminar on Codes.

Friedman asked each committee chairman to prepare a report summarizing their committee's activities for the past year and to mail the report to him as soon as possible.

Treasurer Hardeman reported that the assets in the various accounts on April 30th were: Commercial \$4,863.16, General Fund Savings \$1,829.20, Workshop Fund Savings \$303.06, Research Fund Savings \$2,321.70.

Friedman announced that there are 18 student members of ASHRAE attending City College of San Francisco, and that 9 of these members are here tonight to receive their certificates.

Karl Guttman pointed out to Editor Tom Gilbertson of the Fog Dispenser that his article in the May issue about OUR lady member is not true. Karl said he knows of FOUR lady members. Gilbertson said that the editorial staff is very sorry about the misinformation and that he, personally, would make amends.

Aronovsky reported on the recent CRC meeting in Las Vegas. He said:

1. There are approximately 25,000 ASHRAE members today.
2. 4 new chapters have been chartered since the last CRC meeting.
3. The number of Fellow Awards have been doubled.
4. Golden Gate Chapter's method for recruiting new members, devised by Gene Valerio, was highly complimented. Dix Ervin requested that a copy of our membership folder be mailed to each of the Region X chapter presidents for their use.
5. CRC will request RCC that National sponsor air conditioning expositions on the West Coast every 6th year with the Annual Meeting.
6. There will be a single index system for the next issues of the Guide and Data Books.
7. CRC will ask National to set up a TC Committee to prepare a standard method for rating fans.
8. WACIA donated \$34,500.00 to Region X for research. The funds were divided in proportion to the total membership of each of the 14 Region X chapters. Each chapter donated his share to National for research projects. Golden Gate Chapter's share was \$4,890.00.

Friedman announced that WACIA has additional funds available for chapters within Region X. The funds are to be used for local worthy research or educational projects.

The 1970-71 slate for Officers and Board of Governors published in the March issue of the Fog Dispenser was unanimously elected.

Tom White announced the events for the ASHRAE 1970 Annual Meeting in Kansas City, Missouri, June 29 — July 1, 1970. He said there would be 6 Technical Sessions. Two of our members will be on the program.

Zulfikar Cumali will present a paper entitled "Spectral Analysis of Coincident Weather Data for Applications in Building Heating, Cooling and Energy Consumption Calculation."

Gus Gendler will present a report on the user's experiences with the SCSD (School Construction Systems Development) program for high schools.

After a short break the meeting was turned over to George Aronovsky, Program Committee Chairman, who immediately turned the meeting over to Dick Charles, Moderator. Charles said that the subject will be "Computer Application for Our Industries Today". The meeting consisted of a panel discussion covering the usage of computers.

The panelists and their subjects were:

1. Donald O. McClelland, Jr., Westinghouse, who presented slides showing Westinghouse's programs for making environmental and energy analyses.
2. W. Dart Rinefort, Carrier, who outlined Carrier's computerized selection and performance programs for induction units and certain sized chillers.
3. Lewis Pollock, Trane Co., who described Trane's Computer programs for assisting engineers in their selection of water cooling coils and certain fan-coil unit selections.
4. Zulfikar Cumali, Consultants Computation Bureau, who discussed how computers today save work for the engineers; and what computers will do for engineers in the near future.
5. Richard Charles of Charles & Braun who explained the functions of the non-profit association of Engineers called APEX (Automated Procedures for Engineering Consultants). Engineers, utility companies and manufacturers are joined together to exchange ideas and information for Computer technology as it relates to environmental systems for buildings. Programs may be used by all members of APEX. Development and cost of programs are shared by members.

There being no further business, the meeting was adjourned at 10:10 p.m.

Irving Alger, Secretary