

# SAN FRANCISCO SECTION THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS



FEBRUARY 1978

NEWSLETTER

RAY RAHN 415/781-4211 Editor

## SECTION NEWS

### CHAIRMAN'S NICHE

The response to my call for help with our Sections' activities is appreciated. We now have a full University Affairs Committee. Having a Committee that's composed of more than one person is beneficial in that there is an interaction of ideas and Committee continuity. I realize that the Committee Chairman moves on to other areas of Section involvement at the end of his one-year term. In the past when this happened, the Section Chairman had to find a replacement for him. A great deal of time and knowledge was lost during this effort. In the future the University Affairs Committee should be able to replace the member they lose yearly. It is my intention that every Committee Chairman be willing and able to recommend to the incoming Section Chairman a suitable replacement to his Committee. I believe that this procedure will increase the individual member involvement in the Sections' activities.

Along with this newsletter, you should have received your ballot for next years executive and Nominating Committees. *Please take time to VOTE* and respond to our request for local Section dues. If you also care to, consider contributing to our Scholarship Funds. The Section dues are used to supplement the funds we receive from the National Headquarters. As you all realize, we offer to you professional activities, field trips and newsletters that are worth more than the small Section share of the \$30 per year you pay. The Scholarship Fund helps provide a \$500 Scholarship to a student each year.

I have spent a lot of time this year getting the Sections' manpower to a point where it can operate without continual direction from the Executive Committee. Now its time to see what the Executive Committee can do for you. If you have suggestions on how ASME can be more effective at the Section level, write to me or come to a Section meeting and tell us.

### SECTION ACTIVITIES

#### SAN FRANCISCO SECTION ASME MEETING

Dinner . . . . . Lasagne and Wine — \$8.00

Date . . . . . February 23, 1978.

Time . . . . . 6:00 — Social, 7:00 — Dinner, 8:00 — Meeting.

Place . . . . . Francesco's Restaurant — Hegenberger Road and Pardee Drive; Near Oakland Airport.

Topic . . . . . Rigging International / RIMCO Concept and Performance.

#### COMPANY BACKGROUND:

Rigging International, the world wide engineering and heavy lift rigging contractor, has developed great skill and efficiency in the ancient art of heavy lifting, rigging and transporting. The company has its own system of universal gin poles and hoisting equipment to provide heavy lift capability for every size and weight.

Rigging International... The Master Rigger: Lifting capacity to 2,000 tons. World records for weight and size. HSCC Aware winner for "Outstanding Rigging Job of the Year", 1970-71 and 1974-75.

#### RIGGING INTERNATIONAL MAINTENANCE COMPANY/RIMCO:

Rigging International Maintenance Company (RIMCO) is a wholly-owned subsidiary of Rigging International, the worldwide engineering and heavy lift rigging contracting company. RIMCO offers maintenance services by contract crews for work on container cranes, conveyors, baggage and material handling systems, passenger loading bridges, mobile equipment, pump stations, compressor stations, generators and turbine.

#### SPEAKERS:

Mr. ~~David Hedlund~~ *Clark Gant*  
*Division Engineer* *Major Projects*  
General Manager, West Coast District of Rigging International, President of Rigging International Maintenance Company (RIMCO).

David has 30 years in the construction industry, specializing in management and supervision of: Rigging, Erection, Modification, Relocation and the Maintenance of: Container Cranes, Airline/Passenger Loading Bridges, Industrial Plants and special projects worldwide.

#### Mr. Raymond Barker:

Manager of Rigging International Maintenance Company (RIMCO)

Graduate San Francisco State University, Engineer. Ray has 5 years in manufacturing of large, sophisticated industrial gas mixing systems, specializing in design, manufacturing and project engineering.

Ray has 1 year as manager of RIMCO, specializing sophisticated maintenance programs for: Container Cranes, Ground Handling Equipment and Manufacturing Plants.

#### First Speaker:

Mr. ~~David Hedlund~~ will give a twenty (20) minute speech concerning the conception of Rigging International and the various major projects Rigging International has performed and comment on some of the new projects.

#### Second Speaker:

Mr. Ray Barker will give a twenty (20) minute speech concerning the conception of Rigging International Maintenance Company/RIMCO and the various projects RIMCO is performing and proposed further projects.

*1st*  
*Clark Gant*  
*Major Projects*  
*Division Engineer*  
*General Manager, West Coast District of Rigging International, President of Rigging International Maintenance Company (RIMCO).*

*1st*  
*Ray Barker*  
*Manager of Rigging International Maintenance Company (RIMCO)*

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*1st*  
*David Hedlund*  
*A ten (10) minute film: "The Hanford Giant". A twin boom luffing certificated to lift 1,500 tons. The "Hanford Giant" was constructed by Rigging International for the nuclear lift at Hanford, Washington. This derrick saved up to a year or more of construction time. The nuclear reactor that was lifted into place weighed approximately 1,000 tons. The vessel was off-loaded, transported up a 7° incline and then transported over twelve (12) miles of desert to the construction site. The vessel was the heaviest nuclear lift on record. The derrick alone has seven (7) miles of wire rope.*

*1st*  
*David Hedlund*  
*A ten (10) minute question and answer time.*

*1st*  
*David Hedlund*  
*FOR RESERVATIONS CALL:*

*1st*  
*David Hedlund*  
*DEL WHIPPLE: PHONE: (415) 835-3000, ext. 456.*

### ASME 27TH ANNUAL BAY AREA TECHNICAL DIVISIONS CONFERENCE

#### SOLAR ENERGY — THE STATE OF THE ART

DATE . . . . . February 25, 1978

PLACE . . . . . Royal Coach — 1770 S. Bayshore Blvd., San Mateo, California 94402.

#### PROGRAM

7:45 - 8:45 . . . . . Registration

9:00 - 9:15 . . . . . Welcoming address (Speaker to be announced)

9:15 - 10:00 . . . . . The PG&E Solar/Energy Conserving Homes — Their Construction and Performance.  
Speaker, Art Pasquinelli, PG&E.

10:00 - 10:15 . . . . . Coffee Break

10:15 - 11:00 . . . . . The Ocean Thermal Project, Speaker, Bill Cutler, Lockheed Missiles & Space Co., Inc.

11:00 - 11:45 . . . . . Thermal Photo Voltaic Conversion of Solar Energy, Speaker: Prof. R.M. Swanson, Stanford U.

12:00 - 12:45 . . . . . Lunch

12:45 - 1:30 . . . . . Keynote Speaker (to be announced, probably from DOE)

1:30 - 2:15 . . . . . Developing the Heliostat (or Power Tower) for the Barstow, California installation,  
Speaker: John V. Otts, Sandia Laboratories.

2:15 - 3:00 . . . . . The Case for Photo-synthesis. Growing sugar cane to produce alcohol as a fuel.  
Speaker to be announced.

3:00 - 3:15 . . . . . Coffee Break

3:15 - 4:00 . . . . . Subject and speaker to be announced.

### SAN FRANCISCO BAY AREA ENGINEER'S WEEK

CONTACT: PATRICIA EKlund, Public Relations Director, U.S. Environmental Protection Agency

215 Fremont Street, San Francisco, California 94105 • 556-6695

The San Francisco Bay Area Engineers' Week will be held February 19-25, 1978 with the highlight being a banquet on the evening of February 23, it was announced today by Michael Soderstrand, Sandia Laboratories, General Chairperson of the event.

The week-long Bay Area celebration is sponsored by the San Francisco Bay Area Engineering Council, and coincides with the National Engineer's Week observance, sponsored by the National Society of Professional Engineers.

"The theme for Engineers' Week will be 'Engineers ... Strength in Crisis,'" Soderstrand said. "It is appropriate that the event spotlights the important role engineers play in solving American crises -- vanishing mineral resources, energy shortages, environmental deterioration, water supply shortages and a host of other national problems. No matter what the crisis, ingenuity is our strength," he said.

The nationwide purpose of Engineers' Week, is to call public attention to the role of engineering in social, economic and technological progress. The Bay Area observance embraces nine counties and its principal A Bay Area Engineers Week Scholarship Program involves more than 200 local public, private and parochial high schools in the nine counties. Each school nominates one candidate, who plans to pursue an engineering or scientific education at an accredited college or university and who has excelled in scholarship and extracurricular achievements, to compete in one of 11 different "zones". The 11 zone winners are honored at the Engineers' Week Banquet, where a scholarship of \$2,000 is awarded to the overall winner; and \$1,500 scholarship to the 1st runner-up; \$1,000 scholarship to the 2nd runner-up; and, \$500 scholarships to each of the remaining eight finalists. U.S. Savings Bonds are awarded to the first three winners in each zone bringing the total Engineers' Week prize money to more than \$10,300.

The Engineers' Week Banquet, to be held Thursday evening, February 23, at Goodman's, #10 Jack London Square, Oakland, culminates the week-long Engineers' Week activities. In addition to the scholarship awards mentioned above, four special scholarships are presented by the Femeineers, an organization of wives of members of the Structural Engineers Association of Northern California and the California Council of the American Society of Civil Engineers. A major address on the Week's theme, "Engineers... Strength in Crisis", by a nationally recognized speaker will highlight the banquet. More than 500 engineers, friends and families of scholarship award winners are expected to attend. Tickets are available by contacting Lloyd Bracewell, C.S.O. International, Inc., 2450 Stanwell Drive, Suite 100, Concord, CA 94520; Ph: (415) 798-1711.

The Speakers Program is arranging several Engineering Career Days within the San Francisco Bay Area. Practicing engineers will be available to discuss with high school students their engineering careers.

A Career Guidance Program for high school students aimed at providing factual information on engineering careers and to stimulate interest in continuing education toward an engineering degree. Professional engineers provide students with in-class lectures, seminars and other informative programs on engineering as a future profession.

A Special Events Program involve students and the general public in activities of general engineering interest to be arranged in most of the major geographic areas of the Bay Area. A special feature of this program is tours of plants and laboratories to provide high school students an opportunity to see engineering at work. More than 20 firms and institutions in the nine Bay Area counties will open their doors to visiting students during Engineers' Week. Tours will be conducted at the San Francisco Bay-Delta Hydraulic Model in Sausalito; Chevron Chemical plant; East Bay Municipal Utilities District; Stanford University; Dow Chemical Research Lab; U.S. Steel Corporation; Lawrence Livermore Laboratories; Kaiser Aluminum Research Lab and many others. "These industrial firms, manufacturing plants and research and development facilities offer high school students an opportunity to learn, first-hand, about facilities and techniques that will be helpful to them in the future," Soderstrand said.

The annual celebration of Engineers' Week in the Bay Area is officially saluted by the mayors of many of the cities who issue mayoral proclamations or greetings. Last year, nine cities around the Bay called attention to the celebration in their community.

That national celebration of Engineers' Week traditionally includes George Washington's birthday -- February 22 -- in honor of the first President of the United States, who was himself a surveyor and military engineer.

The 1978 Engineers' Week Committee, in addition to General Chairperson Soderstrand, includes Harry Kattelmann, Fabricated Metals, Inc., General Chairperson and Career Guidance Chairperson; Madeline Pinsky, Sandia Laboratories, Secretary; Wendell Freeman, General Electric Company, Finance Chairperson; Bill Gardner, Pacific Gas and Electric Company, Treasurer; Bob Voelz, Donald Bentley & Associates, Scholarship Treasurer; Cheryl Brandt, Stauffer Chemical Company, Scholarship Chairperson; Lloyd Bracewell, C.S.O. International, Inc., Banquet Chairperson; Patricia Eklund, U.S. Environmental Protection Agency, Public Relations Chair-Pete Hackley, Kaiser Engineers, Special Events Chairperson; Sandra Slivinsky, General Electric Nuclear, Speakers Chairperson; and, Brad Garretson, Garretson, Elmendorf, Zinov, Rebin, Architects & Engineers, Liaison with San Francisco Bay Area Engineering Council. John D. Williams, Bechtel Corporation, is the Past General Chairperson, and Carl Otto, URS/John A. Blume & Associates, is the current President of the San Francisco Bay Area Engineering Council.

### OBITUARY

Bob Spear died December 20th. He was an active and concerned member of ASME for many years and served as San Francisco Section Chairman, 1958-1959. He will be missed.

### SUMMER EMPLOYMENT FOR ENGINEERING STUDENTS

This year the San Francisco Section of ASME is going to try a new idea. We are going to try to compile a list of potential summer employers for student engineers. This list will then be forwarded to ASME members on campus via their ASME representatives. The object of this effort is to place student engineers in industry as soon as possible in their academic careers so these students can gain an appreciation of what engineering is all about.

It will also allow them to make changes in their curriculum in response to what they have learned in industry. If you have such an opening, please send your name, your company's name, address and telephone number, and job description to the address below.

As requested in the past newsletter, we are asking for companies and contacts within these companies to show a student engineer what engineering is all about. This "Student in Industry Day" will take place between March and June at the convenience of the companies and students. Please Volunteer. I believe this exposure is extremely important to a young engineer. Please send your name, company, your job function, and telephone number to the address below:

Donald A. Parker — Hexcel Corporation, 11711 Dublin Boulevard, Dublin, California 94566 • (415) 828-4200

## ELECTION OF SECTION OFFICERS — 1978 - 1979

#### CHAIRMAN:

C.D. Mote, Jr., (University of California) — Dan has been a member of ASME since 1968 and has served San Francisco Section as Technical Division Chairman (1974-1975), Treasurer (1975-1976), Secretary (1976-1977), and Vice-Chairman (1967-1968).



#### VICE-CHAIRMAN:

J.A. Bailey, P.E. (Consultant) — John has served the past year as San Francisco Section Secretary. His experience includes "Twenty five years in mechanical engineering development, design and application, primarily in energy conversion — nuclear power plants, gas turbines and diesel engines. Functions range from design work on the drawing board to engineering vice president of a \$55 million/year company. Employers include large and small industrial companies, a federal government agency and two universities. Currently in private consulting practice planning and implementing organized growth for small, highly technical companies, including start-up situations. This work includes preparing marketing studies and developing business plans and then implementing the plans, providing financial and manpower resources. Products range from computer peripheral equipment to cemetery vehicles."



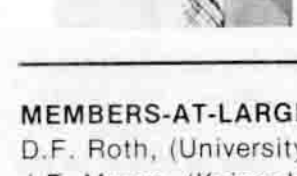
#### SECRETARY:

Jack R. Darnell, (Bechtel) — Jack has been in San Francisco Section for 3 years. He has served as Membership Development Chairman (1976-1977) and Treasurer (1977-1978). His work experience includes: Lead Balance of Plant Engineer — Skagit Nuclear Power Project, responsible for design and analysis of power plant systems and equipment procurement.



#### TREASURER:

Delano "Del" Edward Whipple, (East Bay MUD) — Del is an Associate Mechanical Engineer with 16 years experience. (All at East Bay Water). He is a Registered ME, Past Section Arrangement Chairman, (Past Section Regional Sections Committee Chairman, and Presently Section Program Committee Chairman.



#### MEMBERS-AT-LARGE:

D.F. Roth, (University of California)

J.F. Munro, (Kaiser Industries)

#### NOMINATING COMMITTEE:

E.A. Persson, (East Bay Municipal Utility District)

J.W. Sale, (Pacific Gas and Electricity)

J.P. Van Oerveen, (B.A.R.T.)

H.R. Kattleman, (Fabricated Metals, Inc.)

R.F. Steidel, Jr., (University of California)

J.E. Bradburn, (Bechtel)

R. Stuckgold, (Kaiser Industries)

A.T. Anderson (General Electric Co.)

All nominees for the nominating Committee are Past Chairmen.

Please include your ballot along with your check for Section Dues and insert into the post-paid envelope.

### EMPLOYMENT OPPORTUNITIES

#### Challenging Opportunities with California Public Utilities Commission For Employment in San Francisco

Associate Engineer: Must be an engineering graduate with 4 years utility or utility related experience and California registration as Professional Engineer. \$1,630-\$1,967 per mo.

Assistant Engineer: Must be an engineering graduate with 2 years utility or utility related experience or Masters degree in engineering. \$1,352-\$1,630 per mo.

Junior Engineer: Must be an engineering graduate. \$1,212-\$1,390 per mo.

#### Send Resume To:

California Public Utilities Commission, Room 5206, 350 McAllister Street, San Francisco, California 94102

#### ALEX JOHNSON CORPORATION — Engineering Division

Quality Assurance & Quality Control Engineer: For Circulating Water Pumps - Butterfly Valves & Water Turbines. Responsible to and will report to the QC Manager and will assist in the establishment of a quality control system suitable to the present needs of the company and for a future period of five years.

He will be required to review customers' QA and QC requirements and specifications in conjunction with the Engineering Department and Contracts Department and to review sub-contract manufacturer's QA and QC capabilities.

In collaboration with Engineering and Contracts Departments he will issue instructions and procedures that will ensure compliance with customer's specifications and maintenance of the company's standards of manufacture.

These instructions and procedures will include: Material Standards, Non-destructive testing requirements, Standards of dimensional accuracy, Establishment of inspection witness and hold points in sub-contractors manufacturing schedules.

He will be required to carry out material tests, non-destructive tests and engineering inspection including shop erection and inspection of assembled pumps — valves — turbines. He will be required to assume control of the QA/QC function within a period of two years.

Salary: \$18,000 to \$20,000.

Location: San Francisco.

Respond To: (415) 777-3800.

Employer: Axel Johnson Corporation — Engineering Division.

### ENERGY SERVICES CONSULTING

Power Engineer — Bay Area — Mature individual with power plant planning, design, or construction management experience. Clients are small utilities and industrial owners. Familiarity with gas turbine systems or diesel engine generators is a must. Salary open.

#### Send Resume and letter of introduction to:

Energy Services Consulting — 37 Shoal Drive, Daly City 94014

### "ENGINEERING RESEARCH IN DOE"

John M. Deutch is Director of the Office of Energy Research, Department of Energy. He is a former professor of John M. Deutch and Chairman of the Chemistry department at the Massachusetts Institute of Technology.

From 1961 to 1965 Deutch worked on systems analysis in the Office of the Secretary of Defense. In 1965 and 1966 he was consultant for program analysis in the Bureau of the Budget.

Deutch became an assistant professor of chemistry at Princeton University in 1966, and remained at that institution until 1969. He joined the faculty at MIT in 1979 as associate professor and then as professor, and became department chairman in 1976.

Mr. Deutch was born July 27, 1938, in Brussels, Belgium, and became an American citizen in 1946. He received a B.A. in history and economics from Amherst College and a B.S. in chemical engineering from MIT in 1961, and earned a Ph.D. in physical chemistry from MIT in 1965. He is a post-doctoral fellow at the National Bureau of Standards.

Deutch serves on the Defense Science Board and the Army Science Advisory Panel. He has also been an editorial board member of the "Annual Review of Physical Chemistry" and "Chemical Physics." He is the author of numerous publications.