

# SAN FRANCISCO SECTION

## THE AMERICAN SOCIETY

## OF MECHANICAL ENGINEERS



MARCH 1978

NEWSLETTER

RAY RAHN 415/781-4211 Editor

### SECTION NEWS

#### CHAIRMAN'S NICHE

It is my pleasure to report to you that Cogswell College, located in San Francisco, has received their charter for an ASME Student Section. Congratulations are due them from us for their success. The continuance of Mechanical Engineering as a profession depends solely on the training and encouragement we give to the student engineer.

We are now halfway through our monthly meetings for the year. However we are about 3/4 of the way through the sections business year. There is a tremendous amount of work that is done during the summer months prior to the first meeting. Some of you may have noticed that changes are occurring. Dan Mote, our incoming Chairman has started considering people for committee work. Make no mistake about it, the work is hard at times. But it is very rewarding to see the results of a good effort. Much of the work will be done with your fellow engineers, some who you might never meet in your daily engineering work. If you are interested in participating, please contact any Executive Committee member.

John W. Sale — Chairman

#### — SECTION ACTIVITIES —

##### TOUR OF WORLD AIRWAYS MAINTENANCE FACILITIES

Place: Oakland International Airport, Hanger #110.

Date: Saturday — March 25, 1978.

Time: 10 A.M.

Our tour will last approximately two hours. World Airways has requested Adults Only.

Space is limited and reservations are required.

CONTACT: Del Whipple, Ph: 835-3000 Ext. 456

#### EXAMINATION SITES ARE NEEDED BY THE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

The Board of Registration for Professional Engineers administers its examinations in most major California cities. At the present time, the Board makes use of junior and senior high schools, colleges, universities, convention centers, municipal auditoriums, and such other facilities as are readily available. However, in recent years, the Board has been faced more and more often with the problem of trying to find adequate places in which to hold its examinations. In many cases, facilities which have been considered adequate in the past are now considered to be unusable due to energy considerations, increases in rental fees, changes in examination priorities, etc. Therefore, we are contacting you to ask if your company has any available potential examination facilities.

An optimum facility should be available on an absolutely binding commitment which can be negotiated at least 6 months in advance, should be available on weekends, should have a rental fee of not more than \$1.00 per person of capacity, should be reasonably close to adequate parking, should be readily accessible by means of major thoroughfares and/or freeways, and should have the following physical specifications:

1. A lighting level of at least 100 footcandles.
2. An ambient noise level of no more than 60 decibels during all normal hours of use.
3. Heating and/or air conditioning sufficient to maintain conditions within the normally accepted comfort range.
4. Men's and women's restrooms and drinking fountains in close proximity to the examination room or rooms.
5. A separate, but adjacent, area for persons to take a smoke break which can be readily observed by the examining proctors.

Continued

If Your Company Can Make Such A Facility Available, Please Contact:

DONALD R. WRIGHT — c/o BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS  
1006 Fourth Street, Sixth Floor, Sacramento, CA 95814 • (916) 445-5544

#### — CLASSROOM REVIEWS FOR ENGINEERING EXAMS —

We can help you prepare effectively for your E-I-T or P.E. exam in Mechanical Engineering. For more information on the review program sponsored by the Peninsula Chapter of the California Society of Professional Engineers, please contact:

Professional Engineering Registration Program — Dept. 40, P.O. Box 911, San Carlos, CA 94070  
(415) 593-9731

#### A Professional Workshop On NUCLEAR POWER ENGINEERING

Sponsored By The

ELECTRIC POWER INSTITUTE — California Polytechnic State University, San Luis Obispo Campus

May 11, 12 and 13, 1978 — Thursday, Friday and Saturday

#### About the Workshop

As our country debates the various alternatives to solve energy shortages in both the near and long-term, there is an urgent need to focus attention on certain issues that may hinder the development and production of large amounts of electrical power from nuclear plants. Many engineers feel a need for updating and supplementing their backgrounds in the nuclear power area. Consequently, it seems appropriate to hold a tutorial workshop dealing with this timely subject. The Workshop is being sponsored by the Electric Power Institute of the California Polytechnic State University — San Luis Obispo, with the active support of electric utilities and industry.

The Nuclear Power Engineering Workshop has been designed primarily for the practicing engineer in the utility or electrical manufacturing field who wishes to gain a good insight into the current technical and regulatory status of commercial nuclear power. Additionally, other engineers and administrators in related engineering areas will find the program most valuable. An extensive background in nuclear power is not required prior to the Workshop.

The Workshop is to begin with a politico-engineering statement of current issues about where we stand in terms of the overall scene for nuclear power on the west coast, particularly in the State of California where the situation is especially critical. Recent developments in plant siting, environmental considerations, breeder reactor and fuel cycle alternatives, waste management plans and overall administrative education needs for those involved with nuclear plant proposals will be discussed. The entire Thursday morning session will be devoted to Site Selection of nuclear power plants starting with a historical perspective of California requirements, followed by national considerations and will include the utilities viewpoint of this important and difficult problem area. Manufacturers and government representatives will give their views on the rapidly changing picture and future plans for the fast reactor program. Current policy and near-term solutions to radioactive waste disposal are to be dealt with in some depth, especially from the management standpoint.

For those in the planning stage or not directly heretofore involved, many of the details commonly overlooked will be treated, including scheduling and training of personnel.

An inspection tour of the new 1000MWe Diablo Canyon PWR Nuclear Power Plant will be provided as part of the Workshop Program for those desiring to remain for the third morning (Saturday) of the Workshop.

The excellent support of this Workshop by the Nuclear Power Industry is readily apparent from the program which follows. It represents a tremendous opportunity for engineers to gain a good technical understanding of the status and direction of Nuclear Power.

Registration fee for the three day Workshop is \$175.00. The fee includes cost of all sessions, course material, workshop dinner, lunches, continental breakfasts, break refreshments, certificate of attendance and transcript for one unit of professional credit.

For additional information, contact Dr. Saul Goldberg, Director, Electric Power Institute (805) 546-2319 or Robert Adamson, Professor, Mechanical Engineering Department (805) 546-2405.



#### PNEUMOTRANSPORT 4 IN CALIFORNIA

BHRA Fluid Engineering is holding its fourth international conference on the Pneumatic Transport of Solids in Pipes, Pneumotransport 4, in Carmel-by-the-Sea, California, USA, from 26th to 28th June 1978. The meeting will be held in conjunction with the Colorado School of Mines and with the co-operation of the Materials Handling Division of the American Society of Mechanical Engineers.

Pneumatic conveying systems have many advantages if solids have to be moved within a factory complex, or over considerable distances. Pipelines are compact and have high carrying capacity; they are flexible and easily automated. Powders and particles can either be blown along a pipe or, if the material is very abrasive, they might be carried in capsules in large diameter lines. Pneumotransport 4 will feature a blend of practical and theoretical papers dealing with both methods.

Three applications of pneumatic conveying employed during the construction of the Trans-Alaska oil pipeline are described in a paper from Radmark Engineering Inc. of the USA. Pneumatic conveying methods proved to have distinct advantages over the other methods considered, for instance in the delivery of fill material into confined spaces where a high degree of compaction was required. Costs compared very favourably with other methods, in one case proving to be half the projected cost for an alternative system.

Papers from the UK, Japan, Germany, France and South Africa deal with other applications and new developments.

The latest results from the BHRA/TRRL pneumatic capsule pipeline investigations will also be presented.

Further details from the Organizing Secretary, Pneumotransport 4, BHRA, Cranfield, Bedford MK43 OAJ, England; Telephone 0234 (Bedford) 750422, telex 825059.

**PNEUMOTRANSPORT 4**  
June 26-28 1978, CARMEL-BY-THE-SEA, CALIFORNIA, U.S.A.  
RESERVATION FORM

POST TO:  
Organizing Secretary,  
Pneumotransport 4,  
BHRA Fluid Engineering,  
Cranfield,  
Bedford MK43 OAJ,  
England.

Please reserve me one place for Pneumotransport 4!

|                            |             |                          |
|----------------------------|-------------|--------------------------|
| Inclusive Conference Fee   | US \$175.00 | Please tick              |
| ASME Members               | \$150.00    | <input type="checkbox"/> |
| Authors of Accepted Papers | \$125.00    | <input type="checkbox"/> |
| After May 1                | Add \$25.00 | <input type="checkbox"/> |

Fees should be included with this reservation form, and be made payable to BHRA Fluid Engineering.

The fee covers: Registration fee, Preprints, Luncheons and refreshments daily; Reception and Conference Banquet.

I have organised my accommodation through Kai-Mar Service   
I have made my own accommodation arrangements

**Additional Proceedings**  
Please enter my order for one set of the Proceedings of Pneumotransport 4. Mail and invoice to me later at £20.50 (UK) US \$50.00 (Elsewhere)

**DO NOT SEND MONEY FOR PROCEEDINGS NOW!**

Date .. Signed ..

MY ADDRESS IN BLOCK LETTERS IS AS FOLLOWS:  
(Delete as appropriate) Prof/Dr/Mr/Ms.

Initials .. Surname ..

Organisation ..

Postal Address ..

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Telephone .. Telex ..

1. Please submit one form for each delegate - photocopies of blank form may be used. 2. For those wishing to effect bank transfers, the BHRA account is with the National Westminster Bank, Wharley End, Cranfield, Bedford, England, Account No. 00515787. 3. Unless BHRA is otherwise notified all further correspondence will be sent to this address.

— CLIP OUT FOR MAILING —

### EMPLOYMENT OPPORTUNITIES

— MARE ISLAND —

ENGINEERS WANTED: Mechanical, Civil/Structural and Electrical.

Salary  
GS-5: \$12,947.00  
GS-7: \$14,802.00  
GS-9: \$16,096.00  
GS-11: \$18,258.00

— MANY OF THE 36 TOTAL ENGINEERING POSITIONS OPEN EACH YEAR.

— ENGINEERS BEGIN AT THE GS-5, GS-7, GS-9, OR GS-11 LEVEL DEPENDING UPON THE APPLICANT'S QUALIFICATIONS.

-- 3 Engineers needed Immediately--

— WITH SATISFACTORY PERFORMANCE, ENGINEERS PROGRESS TO THE NEXT HIGHER PAY LEVEL EACH YEAR (FROM GS-5 THROUGH GS-11 AS NOTED AT LEFT).

FOR MORE INFORMATION CONTACT:  
ASST. CHIEF ENGINEER, CODE 441  
PUBLIC WORKS DEPARTMENT  
MARE ISLAND NAVAL SHIPYARD  
VALLEJO, CALIFORNIA 94592  
PHONE: 1-707-646-2421

AN EQUAL OPPORTUNITY EMPLOYER.

#### NEWMAN, HORTWICK ASSOCIATES

260 SHERIDAN AVENUE • SUITE 414 • PALO ALTO, CALIFORNIA 94306 • (415) 326-4770

#### Career Opportunity Profile

#### Client:

A Division of a large, well-established, high-technology firm with a successful, rapidly growing position in large, sophisticated medical instrumentation systems. The Client's products are generally recognized as among the best in the markets served. They have strong commitments to the area of medical instrumentation and they devote substantial resources to support these activities.

Location is in an attractive Western States area. (Bay Area)

#### Position

Title: Manager, Mechanical Engineering Department.

Why Open: New position, none of present staff have adequate managerial and technical background to justify Promotion.

Reporting Function: Position reports to — Manager, Research & Engineering Function

Reports to position — an initial staff of 5 (1 Sr. M.E., 2 Jr. M.D., 2 Sr. M.E. Techs), with further additions expected.

Responsibilities: Manage M.E. Dept. and personally contribute, in execution of complex mechanical engineering programs related to large, sophisticated linear accelerator and radiographic medical instrumentation systems.

- 1) — Set up new Mechanical Engineering Department.
- 2) — Hire, train, fire and salary/performance review Mechanical Engineering staff.
- 3) — Provide Mechanical Engineering interface with other R & E Departments Marketing, Manufacturing and QA in matters related product development and improvement and long range planning.
- 4) — Manage Mechanical Engineering Dept. so that it functions effectively in a Project/Matrix R & E system.
- 5) — Provide technical guidance to Mechanical Engineering staff as required in all Projects and provide ME input on an individual basis as required.

Salary: \$25K — \$30K

#### SUMMER EMPLOYMENT OPPORTUNITIES FOR STUDENTS/FACULTY MEMBERS...

The Historic American Engineering Record (HAER) needs students/faculty members to staff field teams this summer... they want people who are good historians to research and write about a wide range of engineering and industrial sites... requirements include strong writing skills, research experience in primary and secondary sources dealing with technological or economic history. Reply before April 1 to:

Douglas L. Griffin, Chief, HAER,  
U.S. Department of Interior, National Park Service, Washington, D.C. 20240.

#### — REGIONAL STUDENT CONFERENCE —

Place: San Jose State University

Date: April 21st and 22nd.

Sponsored by the ASME Student Section under the direction of Professor Phillip Blair.

This is a call for technical presentations. Note that the presentation need not be on a technical subject. It may be a technical presentation on any subject in which you have interests. Awards will be presented at a banquet on April 22.

If you would like to make a presentation, contact Professor Phillip Blair, Ph. (408) 277-2443; if no answer Ph. (408) 277-2484.