



# AMERICAN SOCIETY OF CIVIL ENGINEERS

VOL. 48 - No. 5

Our 63rd Year

February, 1976

## FEBRUARY MEETING

Philadelphia Section, American Society of Civil Engineers

Sponsored by the Hydraulics and Sanitary Engineering Group

# TUESDAY, FEBRUARY 10, 1976

Engineers' Club, 1317 Spruce Street, Philadelphia

Cocktails - 5:30

Dinner - 6:30

Meeting - 7:30

SUBJECT:

#### PHYSICAL HYDRAULIC MODELS

SPEAKER:

FRED E. PARKINSON, Vice President and Development Manager LaSalle Hydraulic Laboratory, Ltd., LaSalle, Province of Quebec, Canada PROGRAM HOST:

DR. CARL M. KOCH, Chairman, Hydraulies and Sanitary Group



In the modern technical world where computers and mathematical modelling predominate, it seems almost archaic to talk about physical hydraulic models. However, they are still alive and well; and solving many problems that their sophisticated electronic competitors cannot touch.

Since graduating from the University of Alberta, Mr. Parkinson has spent his whole post-graduate and professional career working in the hydraulic modelling field. This has included doing diploma studies at the

Imperial College of Science, London, Ecole Polytechnique, Grenoble, France and Massachusetts Institute of Technology, as well as research at the Hydraulics Research Station, Wallingford England and Sogreah Laboratories, Grenoble. He has been with the LaSalle Hydraulic Laboratory since 1960.

Using slides to illustrate examples, Mr. Parkinson will discuss a variety of hydraulic models he has been involved with covering hydro-electric power, river navigation, coastal and port protection, municipal works and nuclear power cooling water intakes.

## SPECIAL FEATURE:

#### "Temple University Night"

The ASCE Student Chapter members, faculty and alumni of the Civil Engineering Department of the Temple University College of Engineering Technology will be honored at this meeting. All students, faculty and alumni are cordially invited to attend.

# Free Beer and Refreshments at the Meeting

Mail Reservation Cards Immediately — Win a FREE DINNER!

STUDENTS — Plan to attend for Dinner (Half Price) or meeting after Dinner

#### ITEMS OF INTEREST

Dr. Koerner Addresses Reading Branch

Dr. Robert M. Koerner, President of the Phila. Section, ASCE, was principal speaker at the January 15, 1976 meeting of the recently - constituted Reading Branch of the Phila. Section. Dr. Koerners' subject was "New Developments in the Instrumentation of Dams—Acoustic Emission Monitoring." The talk described long-term dam safety and the effective monitoring of dams by instrumentation.

A gratifying turnout of the fledgling Branch honored Dr. Koerner and his wife, Paula at the meeting.

#### Univ. of Pa. Receives Grants

The University of Pennsylvania has been awarded \$75,000 to evaluate the feasibility of transporting solid freight via pipeline in capsules, by the U.S. Dept. of Transportation. Principal Investigator is Prof. Iraj Zandi, of the Civil and Urban Engineering Dept. The study will compare the cost, service, capacity, and environmental impacts of the pipeline with conventional railroad, piggyback, and truck movement, as well as evaluate technological problems of pipeline transport.

Penn has also been awarded support for a second year of work on a research project entitled "Development and Application of Planning Methods for High

(continued on page 6)

Notice: If THE NEWS arrives late—or you forget to mail your dinner card—please call The Engineer's Club, PE 5-5234 and leave word for Mr. DeKovacs, Exec. Mgr., to reserve a dinner plate for you. Of course, you are welcome for the meeting later, if you are unable to have dinner. No reservation necessary.

## JANUARY MEETING

January 13, 1976

# Engineers' Club

(Editor's Note: Our thanks to Dr. S. V. Nathan, Chairman of the Section's Geotechnical Group, for preparing the technical portion of the following writeup).

A large audience of over 200 attended the Phila. Section's first meeting of the Bicentennial year, sponsored by the Geotechnical Engineering Group. Dr. Sreenivasan V. Nathan, Chairman of the Group, was our very competent Program Host. Section President Robert M. Koerner presided.

The principal speaker of the evening was Dr. James K. Mitchell, Professor of Civil Engineering, University of California, at Berkeley. The subject was: "Geotechnics: 1776 - 1976 - ?"

#### "Drexel Night"

The spotlight of the meeting was on Drexel University, as the Pmladelphia Section continues its policy of honoring the ASCE Student Cnapters and Civil Engineering Departments of area universicies and colleges. A considerable turnout (over 75) including, gratifyingly, many females, of Drexel faculty, asumni and students came to celebrate the occasion. President Koerner, himself a Drexel Professor, was hard-pressed to restrain his own ebullient enthusiasm in being surrounded by his many colleagues, associates and students, whom he asked to rise and be recognized. It was certainly an enjoyable occasion for

Dr. Bernard M. McNamee, Head of Drexel's Civil Engineering Department, spoke briefly on ongoing and new programs and curricula. He stressed the importance of the Cooperative Work-School program at Drexel, and explained the advantages in preparing a student for his or her career in industry prior to graduation.

A distinguished guest who received a special introduction by Dr. Koerner was Dr. Leroy A. Brothers, retired Dean of the College of Engineering at Drexel, beloved teacher and friend of hundreds of members of the Phila. Section. Dr. Brothers, honored as the Engineer-of-the-Year of the Delaware Valley in 1963, received an ovation when he was introduced.

## Geotechnics: 1776 - 1976 - ?

Professor Mitchell's presentation, illustrated with nearly 150 slides, was the underpinning, on which the Geotechnical

Group's theme for 1976, "State-of-Art of various facets for Geotechnical Engineering in the Tri-State Delaware Valley" is centered. Beginning from October 1975 and ending in May 1976, the Group presents each month a different facet of Geotechnical Engineering. The speakers are chosen specialists from the Delaware Valley area in a 2 to 3 member panel form, emphasizing the case-history and environmental aspects of Soil Mechanics.

Professor Mitchell's talk reviewed the status of soil and foundation engineering at the time of the 1776 Revolution, followed by an assessment of Coulomb's (1776) contributions. Key developments in these areas over the following 200 years (1776-1976) as well as the emergence of geological engineering and rock mechanics as essential parts of Geotechnical Engineering.

## Geotechnics in Ancient Times

Among other illustrations, many items of historical significance were reviewed: Egyptian Pyramids, Great Wall of China, Roman Aqueduct, the classic principle valid even today, of Vitruvius during the 1st Century B.C., Tower of Pisa, the Frankford Avenue Bridge of Philadelphia, Bullet's Classic Analysis, Bethlehem Waterworks in Pennsylvania (1754) and the Pumphouse.

#### From 1776 to Modern Times

Using the unique illustrative medium of the philatelist's album, Dr. Mitchell described major structures and their foundation and soil challenges from George Washington—the surveyor's time (1776) to the era of the Panama Canal (1914). He then surveyed the development of modern soil mechanics from Karl Terzaghi, the father of the science (1883-1963) to the lessons learned from major earthquakes, slides and dam failures.

Our speaker identified the challenges of the late 1960's within the spectrum of moon-space exploration and the emergence of a new excitement over sea floor investigations.

#### Soil Mechanics 200 Years from Now

Dr. Mitchell, finally, prophetically spelled out the challenges for the future as: 1) Evaluation of in-situ properties of sand deposits, 2) Definition of site conditions, and 3) Better methods of in-situ property measurement.

Our distinguished speaker intuitively hypothesized possibilities of Tunneling Machine deploying new concepts, rock shatter by electron beam, underground reactors for Power Plants, off-shore

platforms and Earthquake Resistant Design and open-pit mining operations.

After concluding the talk with a kaleidoscopic view of earth view from Apollo 15, Professor Mitchell has this to emphasize from Coulomb's 1776 essay: "While great men, installed in the roof of the building, design and build the upper storeys, ordinary workmen, scattered in the lower storeys, or hidden in the darkness of the foundations, should try only to perfect that which more capable hands have created", or to rephrase in Dr. Mitchell's words, "What is past is the prologue".

It was an inspired talk by a highly qualified authority on the science of soil mechanics. Dr. Mitchell was awarded the Section's Certificate of Appreciation by President Koerner at the conclussion of his address,

## PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS

## Officers 1975-1976

PRESIDENT
Robert M. Koerner
VICE PRESIDENTS
Will M. Heiser Walter H. Clark
SECRETARY
Ira N. Pierce

ASSISTANT SECRETARY
Joseph M. Cervone
TREASURER
Theodore Davis

MEMBERSHIP SECRETARY
Gerald M. McDonnell
DIRECTORS

DIRECTORS
Howard Minckler George N. Beetle
Robert Lynch Robert C. Belfi

Charles Peters
Ernest Brizell
(from Associate Member Forum)
PAST PRESIDENTS
James W. McPhillips Lawrence M. Moy
Alfred O. Quinn

#### PUBLICATIONS COMMITTEE

Sidney Robin Chairman and Editor of THE NEWS

Joseph R. Syrnick Assistant Chairman and Associate Editor

Staff Writers: Will M. Heiser John E. Spitko

Associate Member Forum News Editor: William J. Parente

> Publications Coordinator: Albert M. Tantala

Advertising Manager: Joseph M. Cervone

SEND COPY TO:

Sidney Robin 4745 N. 12th Street Philadelphia, Penna. 19141

COPY DEADLINE FOR MARCH, 1976 ISSUE FEBRUARY 17, 1976

#### TECHNICAL GROUP ACTIVITIES

Construction

Date: Tuesday, March 2, 1976

Location: Engineers' Club - 7:00 P.M.

Subject: CPM Scheduling Speaker: Jay Pattison,

International Consultants, Inc. Program Hosts: Jim Stone and Fred Plotnick, Co-Chairmen Cons. Group

Mr. Pattison is especially suited to speak on this topic having been involved in scheduling since the early 60's. He has had lecturing experience having taught courses in Construction Management both at Temple and University of Pennsylvania, Jay's topic will be broken into three parts:

- 1. General Background and Basic Theories — General uses of CPM
- 2. CPM and the Construction Manager
- 3. Broadbrush Scheduling on Large

## Geotechnical Group

Date: Tuesday, February 17, 1976 Engineers' Club - 7:00 P.M. Subject: "Drilled Pier Foundations" Speakers: William S. Gardner, Woodward-Clyde Consultants; James V. Toto, Dames and Moore; Dr. Ing Hieng Wong, Dames and Moore Program Host: Dr. S. V. Nathan, Chairman of Geotechnical Group The discussion continues the overall theme of state-of-the-art presentations. Mr. Gardner, a noted author will describe design aspects; and Mr. Toto and

## Hydraulies and Sanitary Group

The Section's February 10th, 1976 meeting will be sponsored by the H & S Group. See page one for details.

Dr. Wong will illustrate various case

histories of drilled pier installations.

#### January Meeting

A luncheon meeting of the Hydraulics and Sanitary Group was held on January 8, 1976 at the Engineers' Club. Program host was Michael D. Nelson, Chief, Water Pollution Control Division, Philadelphia Water Department.

Richard P. Milne, P. E., Associate of Greeley and Hansen Engineers, was the guest speaker and described the preliminary report and final design (1959-1968) and construction (1968-1972) of the Spring Creek Storm Overflow Treatment Plant. The plant was built to clean up the beaches of Jamaica Bay in New York City.

The plant receives overflows from a combined sewer system during storms. In this unique plant, intermingled sanitary sewage and stormwater from the combined sewers flow into large channels, where the flow is dosed with chlorine before entering into Jamaica Bay.



## "COUNTDOWN TO CONVENTION"

The 1976 ASCE National Convention and Exposition

September 27 — October 1, 1976 Sheraton Hotel Philadelphia, Penna.

Theme: "American Civil Engineering -A Bicentennial of Public Service"

General Chairman James W. McPhillips presided at an Activities Committee meeting on January 22, 1976. Present also were New York Headquarters Staff members Fred Favata and Al Turchick. Convention Management and Technical Services Representatives to provide advice and counsel to the Committee. Planned programs for Students, Reception, Social Events, Excursions, Women's Activities Public Information and Attendance Promotion were discussed and plans shaped to final phase --- as the months to Convention time narrow to a precious few.

Mr. McPhillips announced the appointment of Bruno J. Talvacchia and Sidney Robin to the Finance Committee to continue the work which the late Dr. John J. Gallen so brilliantly advanced on the commemorative Bicentennial historical book for the Convention: "The History of Civil and Construction Engineering in the Delaware Valley." Mr. Robin had been acting as a consultant to Dr. Gallen on the project up to the time of the latter's sudden death, which has left us all overcome with grief and loss. A memorial tribute to Dr. Gallen appears on page 5 of this issue of THE NEWS).

A detailed account of the commemorative book and an appeal for subscriptions to it was published in this column in the January 1976 issue of THE NEWS. Mr. Talvacchia and Mr. Robin will welcome inquiries about participation by Consulting Engineering Firms, Contractors and Construction Companies, and all construction-allied industries and institutions. Also, Messrs. Talvacchia and Robin will be pleased to have assistance in this important

The grit and organics, which settle in the channels, are removed in a unique way. In each of the six channels, a traveling bridge with a spray water header provides jets of water to wash the settled material the length of the channel. This sludge is pumped through equipment which separates out the grit while the organic-laden wash water flows out to a sanitary sewer which con-

(continued on page 6)

and rewarding work from as many Philadelphia Section members as possible.

To discuss contributory participation as a Patron, Sponsor, Professional Card advertiser or Historical Text Publication; or as an assistant on the Committee please get in touch as soon as possible with:

> Bruno J. Talvacchia 1845 Wynnewood Road Phila., Pa. 19151 GR 3-7647

or Sidney Robin 4745 N. 12th Street Phila., Pa. 19141 DA 9-4121

# MANAGEMENT FOR ENGINEERS ΔN EXECUTIVE DEVELOPMENT **PROGRAM**

Presented by The Phliadelphia Section ASCE

An educational course organized for the specific needs of engineers DATES:

Thursday evenings, 6 to 9 P.M., Feb. 19 through May 6, 1976

#### LOCATION:

Delaware Valley Regional Planning Commission 3rd Floor, 1819 Kennedy Blvd. Philadelphia, Pa.

TUITION:

\$150

INFORMATION:

Dr. Louis Malfara DE 3-2150

Allan Ritchie WA 2-5024

## PROGRAM OUTLINE

- \* Leadership and Organizational Dynamics for the Engineering Manager
- \* Project Management and Effective Cost and Project Control Techniques
- Decision Making
- Time Management
- Planning for the Engineering Firm
- Transactional Analysis
- Management by Objectives
- Human Relations
- Planning and Conducting the Effective Meeting or Conference

## 1976 MEAD PRIZE for ASSOCIATE MEMBERS

The topic for the 1976 Daniel W. Mead Prize for Associate Members will be "The Impact of Engineering Ethics on the Development of Modern Engineering Practice: 1776-1976". This can be annotated as follows: Civil engineers of today, and the professional environment in which we practice, have been formed by many factors. High quality educational training, advanced analytical tools, and new construction materials and techniques have all contributed to the development of modern civil engineering practice.

The traditional ban on competitive bidding among engineers is another factor which has influenced the profession over the years. This "no-bid" philosophy has strongly influenced the operation of modern consulting firms. There are legitimate and pursuasive arguments on the pros and cons of bidding. In any case, recent court action prohibiting a "no-bid" agreement among engineers will alter the practice. How, to your way of thinking, have ethics shaped the profession over the past 200 years?

Specific rules include the following:

- \* Only one author can write each paper and the author must be an Associate Member of the Society.
- \* Papers must be limited to 2000 words and be submitted to National by a local Section by May 1, 1976. (Must be submitted to the Local Section by April 1, 1976).
- \* The national winner will receive a wall plaque and certificate and will have his paper published in Civil Engineering or in Engineering Issues.
- \* For more detailed information please contact Ernest Brizell (LO 7-3000, Ext. 184), who will be the Philadelphia Section coordinator for this contest.

It will be recalled that a Philadelphia Section member was the winner of the 1974 Mead Prize. He is John E. Spitko, Special Assistant to the Office of the Deputy Commissioner for Engineering,

# JUSTIN & COURTNEY, Inc.

Division of O'Brien & Gere Engineers, Inc.

Water Supply, Reservoirs, Flood Control Drainage, Irrigation, Dams, Hydroelectric Power, Pumped Storage Planning - Reports - Design - Inspection

226 W. Rittenhouse Square Philadelphia, Pa. 19103 (215) 546-5504 Phila. Department of Water. John's paper was on the 1974 theme: "The Engineer's Response to Non-Engineering Criticism of His Professional Work" (See a full report on this in the October, 1974 issue of THE NEWS).

So, get with it fast, Associate Members! You have good inspiration to get to work with your papers.

#### STUDENT CHAPTER NEWS

#### Drexel - February Meetings

The Drexel Student Chapter has scheduled the following meetings:

Date: Wednesday, February 4, 1976; 2:30 P.M.

Place: Civil Engineering Conference Room, Drexel University

Speaker: Mr. Speacer Bunting, Retired Vice-President Westmoreland Coal

Topic: "Employment Opportunities In Mining for Civil Engineers and the Ecological and Environmental Aspects of Civil Engineering".

Date: Wednesday, February 25, 1976; 2:30 P.M.

Place: Civil Engineering Conference Room, Drexel University

Speaker: Lt. L. R. Norris, III, U.S. Navy Topic: "Environmental Protection"

These meetings are open to the general ASCE membership and your attendance is encouraged. Refreshments will be served.

#### Villanova - New Officers and Programs

Ring out the old and bring in the new!
The spring semester of 1976 started out
well with the inauguration of newly
elected officers. They are as follows:
William Gilman --- President

Douglas Conover — Vice President
Calisto Bertin — Vice President
Sharon O'Neill — Treasurer
Robin Chen See — Recording Sec'y
Charlene O'Conner — Corres. Sec'y
With a large cabinet, we will be able to

With a large cabinet, we will be able to engage in more activities and will be prepared to work towards the National Student Chapter Convention in October.

Some of our activities underway are a membership drive among the underclassmen to obtain more participation, the planning and construction of two concrete canoes, regular monthly meetings, TGIF's ("Thank God It's Friday") and, with our newly appointed athletic director, R. David Gray, basketkall and softball games will be scheduled.

Speaking on the concrete canoes now, we have organized a club and have even dubbed a name to it, "The Triple C," (Concrete Canoe Club). Look for the "Triple C" out in front April 3rd.

Our next monthly meeting is scheduled for February 11th, but our guest speaker is tenative at present. As usual, refreshments will be served at the close of the meeting.

Villanova's Engineering Joint Council sponsors the TG's now as it provides a chance for all engineering societies to come together and converse. This creates a warmer feeling between the different fields.

Our Chapter is once again taking part in a Careers Conference held March 18th for all engineers. Speakers will be sought from three fields of civil engineering: transportation, structures and water resources.

Finally, the Student Chapter Conference held here at Villanova, will take place on April 12th,

#### A. M. F. NEWS

#### Associate Member Briefs

Marshall F. Linton, P. E., has recently been appointed Contract Proposal Engineer for District 6-0 of the Pensylvania Department of Transportation. Marshall is a 1969 graduate of Villanova University.

Joseph R. Nowakowski, P. E., has been named Airport Construction Coordinator also for District 6-0 of PennDOT. Joe is a 1970 graduate of Drexel University.

Richard F. Hill, P. E., Villanova '63, in addition to his duties as Design Liaison Engineer for I-95, is also coordinating construction activities between Penn-DOT contractors and consultants for all center city Philadelphia I-95 projects.

#### Fellowships and Scholarships

The Associate Member Forum would like to emphasize the fact that there are numerous fellowships available for research and graduate study in hydraulics and structural design from the American Society of Civil Engineers. Specifically, the J. Waldo Smith Hydraulic Fellowship, the Freeman Hydraulic Fellowship, and the O. H. Ammann Structural Fellowship are available in amounts up to \$3,000. Further information can be obtained by writing: ASCE, United Engineering Center, 345 East 47th St., New York, N.Y. 10017.

# 45

# HUDSON ENGINEERS, INC.

Professional Engineers & Consultants

Supports the Goals and Activities of A.S.C.E.

Telephone 215-732-5000 211 S. BROAD STREET Philadelphia, Pa. 19107



## LEGISLATIVE CORNER

by John E. Spitko

#### AIA Seeking Charter Amendment

The Philadelphia Chapter of the American Institute of Architects has proposed an amendment to the Philadelphia Home rule Charter. The amendment would create a new Design Frofessional Selection Board in the Department of Public Property. The Design Professional Selection Board would consist of seven members. The Mayor would appoint six members; two from the general public, two from a list of five architects submitted by the AIA, one from a list of three engineers submitted by PSPE and one from a list of three engineers submitted by the American Consulting Engineers Council. The Art Commission would appoint one member. When the City has a project requiring an architect or engineer the Board would recommend at least three firms for the job. The Commissioner of Public Property would then make the final selection from those recommended by the Board. Each of the four members of the Board who is a registered architect or engineer would serve for a term of four years.

The December 18, 1975 issue of "Engineer News Record" reported that this amendment was first proposed last March, but was opposed by the Mayor and City Council. Therefore, the amendment failed to win the necessary 2/3 vote of the Council. Now the local chapter of AIA is trying to obtain 20,-000 signatures of registered Philadelphia voters. After the 20,000 signatures are obtained the petition for the new amendment will be filed with City Council. Because of the 20,000 signatures, only a majority vote, as opposed to a 2/3 vote, would be needed from City Council to place the amendment before voters at a primary or general election. If the amendment is approved by the voters, it becomes part of the law of the City. AIA has reportedly made other similar proposals for a selection board as far back as 1972. The primary reason for this amendment is to attempt to remove politics from the procedure for awarding architect and engineer consulting con-

#### Update on Pa. General Services Dept.

As reported in "THE NEWS" November 1975, Pennsylvania recently merged the old General State Authority into a new General Services Department. This was done in an effort to remove politics from the Commonwealth's design selection procedures. A recent discussion with

a GSD staff member has indicated that the five member Selections Committee has not yet been selected. It is anticipated that the members of the Committee will be picked in the near future. At that time, the Committee will be needed in order to select engineers and architects for capital projects. At present. House Bill - 1833 is near passage. This bill will authorize bond issues to cover upcoming capital projects for which engineers and architects will be needed. GSD regulations on criteria for the evaluation of firms have not been promulgated yet. This will be done by the new Selections Committee. We will continue to monitor the implementation and programs under the GSD in the months to come.

#### JOHN J. GALLEN



The Philadelphia Section, ASCE, joins the entire Delaware Valley community and beyond in grief at the passing, on January 17, 1976, of Dr. John J. Gallen, after a heart attack

at his Havertown home. He was 70. Dr. Gallen was a Past President of the Philadelphia Section (1960-61). Our hearts go out to his beloved wife Frances (Fran) — long an active member of the Section's Women's Auxiliary — and to his four sons and three daughters.

The sudden tragedy was a particular jolt to us at ASCE because up to his last moment of life John was hard at work as Co-Chairman of the Finance Committee of the 1976 ASCE National Convention to be hosted by the Philadelphia Section next September. He was the guiding force behind the chief fund-raising vehicle for the Convention, the commemorative book: "The History of Civil and Construction Engineering in the Delaware Valley."

But John Gallen was dedicated not to one cause but to many—simultaneously. In that fulfilment lies the key to the dimensions of his great and rewarding life: as a devoted husband and father; as a pillar of spiritual and physical dynamism and vitality in the community; as a peerless practitioner of his profession, teacher and educational administrator; and as an active affiliate, in addition to numerous engineering technical societies, of private, religious and civic organizations. Each group claimed him almost exclusively as its own; and

the time, effort and attention he contributed to them did indeed appear undivided and unshared. This quality of benevolent unselfishness is perhaps Dr. Gallen's greatest legacy.

Dr. Gallen's educational and professional catalogue, and his activities on behalf of the American Society of Civil Engineers, the Phila. Section and the entire profession of engineering, would be a many-paged document in itself. He was best known in recent years as the beloved and respected Dean of the College of Engineering of Villanova University, at which institution he received his B.S. in Civil Engineering in 1927 and an honorary doctorate in 1968. His Master of Science degree in Civil Engineering was earned at the University of Pennsylvania in 1947. Dr. Gallen joined the Villanova C.E. Dept. Faculty in 1940 and was appointed Dean of the College of Engineering in 1961. He retired from this post only last September and looked forward to a busy constructive life in the many avocational activities and travel for which he had so little time before. Even in retirement, Dr. Gallen continued to provide counsel and guidance to the many Villanova students who consulted with him on their special problems at the office he maintained at the University.

A demonstration of the affection and esteem with which he was held in the community was the presence of hundreds of friends, students and associates, standing in long lines for hours to pay last respects to this outstanding man.

Rest in peace, John Gallen! In the comfort of recalling your contagious smile, your instantaneous wit and legendary story-telling talent; in reaping the rewards of your generosity and graciousness; and in your humanity and greatness of character—will your beloved family and countless friends remember revere and honor you.

by Sidney Robin

## SPRAGUE & HENWOOD, INC.

Foundation Investigations - Soil Testing and Test Borings - Grout Hole Drilling and Pressure Grouting - Diamond Core Drilling

> Philadelphia, Pa. (215) 735-6774 Bridgeport, N. J. (609) 467-1800

#### TECHNICAL GROUP ACTIVITIES

(continued from page 3)

veys it to a nearby sewage treatment plant. The grit is trucked to a land disposal site.

#### Structural Group

Date: Thursday, February 19, 1976
Luncheon Meeting, Engineers' Club—
12:00 noon

Speaker: Lawrence G. Adams, Regional Engineer, American Iron and Steel Institute

Subject: Fire Protection and Life Safety Program Host: Professor Frederic Roll, Chairman, Structural Group

## Transportation and Urban Development

Date: Tuesday, February 17, 1976

12:00 Noon (Luncheon; \$3.00 Buffet) Engineers' Club

Subject: "How a Shipper Chooses the Mode"

Speaker: Joseph Queenan,

W. H. Rorer Company

Program Host: Louis W. Petulla, Chm., Transportation & Urban Development

#### ITEMS OF INTEREST

(continued from page 1)

Accessibility Urban Corridors." The project examines current rapid transit and road planning in the Southwest Corridor of Chicago.

## Student Prize Winner

John A. Warner, a Ph.D. candidate in the Civil and Urban Engineering Department at the University of Pennsylvania, won first prize in the 1975 Student Paper Contest of the Transportation Research Forum. The TRF is an international society of economists, engineers, government officials, and managers interested in transportation. The title of his paper is "Model Investment Implications of Federal Urban Transportation Financial Assistance Programs," and the award was made at the TRF Annual Meeting in Toronto, Canada, November 3-5, 1975.

## A. W. MARTIN Associates Inc.

Consulting Engineering Services for:

Pollution Abatement and Control
Environmental Systems:
Wastewater — Solid Waste
Highways - Transportation - Traffic Control
Land Planning - Structures - Surveying
Feasibility - Analysis - Design-

Presentation - Implementation

900 W. VALLEY FORGE RD. King of Prussia, Pa. 19406

P.O. Box 190

## (215) 265-2700

#### MEMBERS IN THE NEWS

Carmen F. Guarino, Phila. Commissioner of Water, is Chairman of National ASCE Environmental Engineering Division's Urban Waste Committee. Turough the research of several task committees, data on the design and performance of selected processes toward publication of a series of state-of-the-art papers is being developed.

### NATIONAL ENGINEERS' WEEK

Many Phila. Section ASCE members will serve on important Committees for the 1976 Engineers' Week observances in the Delaware Valley.

Dr. John L. Rumpf, Dean of the College of Engineering Technology at Temple University, has been named General Chairman for the celebration.

Dr. Rumpf, as the Phila. Section's official nominee was honored in 1975 as Engineer of the Year by the 50 technical and professional societies in Delaware Valley. His appointment as General Chairman for the 1976 observance was announced by Joseph A. Wintz, president of the Philadelphia Chapter, Pennsylvania Society of Professional Engineers. Mr. Wintz, also a Phila. Section member, who heads Wintz Bros., Inc., and lives in Rydal, announced the appointment of sub-committee chairmen and members of the committee.

The 1976 observance will be held February 20-28 in conjunction with National Engineers' Week, which will focus attention in the Bicentennial Year on the role of engineering and technology in the nation's growth.

In 1975 the Delaware Valley program centered on national efforts to find new energy sources and Dr. Rumpf was honored for his achievements as an engineering educator, researcher, practitioner and administrator.

The national and Delaware Valley programs will feature high school conferences, guidance counseling seminars on engineering careers, exhibits on engineering achievements, guided tours of industrial plants, talks by engineers before student and civic groups on the theme "American Ingenuity: 200 Years of Engineering," and the selection of the 1976 Engineer of the Year.

Special features of the Delaware Valley program will be two Science Teachers Workshops for junior and senior high school teachers and guidance counselors, and the presentation of awards

for outstanding engineering achievements in Delaware Valley.

General Electric Company's Space Division and Sun Shipbuilding and Drydock Co. have been named Outstanding Engineering Achievements and will be honored at the Engineers' Annual Banquet at Drexel University on February 28.

General Electric was selected for development of a solar heating system for industry at its Valley Forge Space Center and Sun for its new launching facility at its Chester, Pa. shipyard.

General Electric's solar energy system will provide long-term solar heating performance and reliability data at its Valley Forge Space Center. It also serves as a large-scale test-bed for collector development and comparative testing.

Engineers have projected that by the year 2000 this system could save about the same amount of power annually as the entire electric utility industry produced in the United States in 1970.

As an added bonus, the engineers believe, it would reduce air polluting emissions by over 430,000 tons and eliminate 20 million tons of solid waste.

Sun Ship installed a slab-type 1100-foot long building platform and new floating drydocks as part of its \$45 million modernization program. This enables Sun to build vessels up to 400,000 deadweight tons.

Sun needed more flexibility in its operation since it did not want to build a vessel it could not drydock for repair.

Phila. Section, ASCE members appointed to key committee posts are the following: Lewis Caccese of the Corps of Engineers is fund raising chairman; David M. Barr of the Corps of Engineers, is Secretary of the General Committee; Edward C. Lawson of the Reading Company, heads the Engineer of the Year selection committee aided by past chairman Robert J. Fisher of Hudson Engineers, Inc.; Edgar Hendler Hudson Engineers, Inc., is vice chairman of the Intersociety Relations Committee; Robert Jaggard (Reading Branch) Corps of Engineers resident engineer at the Blue Marsh Lake Project. Bernville, Pa., is Chairman of Engineering College Coordinating.

Others serving on the Engineers' Week committee are: Robert Freer representing the Valley Forge Chapter, PSPE; Larry Adams of American Institute of Steel Construction; and Dr. Richard Woodring Dean of the College of Engineering, Drexel University.

## Section Members!

## HAVE YOU MAILED IN YOUR SECTION DUES CHECK?

If not, please do so now. Make check payable to "Phila. Section ASCE" (\$10.00) and mail to ASCE, c/o Engineers' Club, 1317 Spruce St., Phila., Pa. 19107