

the news



PHILADELPHIA SECTION
AMERICAN SOCIETY OF CIVIL ENGINEERS

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OUR 69th YEAR

March-April, 1982

APRIL JOINT DINNER MEETING

Philadelphia Section, American Society of Civil Engineers
Philadelphia Post, Society of American Military Engineers

TUESDAY, APRIL 13, 1982

Engineers' Club, 1317 Spruce Street, Philadelphia

Cocktails — 5:30 P.M. Dinner — 6:30 P.M. Meeting — 7:30 P.M.

SUBJECT:

TRIDENT BASE CONSTRUCTION

SPEAKER:

CAPTAIN JAMES M. GREENWALD, Deputy Officer in charge of construction, Trident, Kings Bay Submarine Support Base

Captain Greenwald will discuss the unique construction considerations of a Trident Naval Submarine Base. Captain Greenwald was stationed at the Trident Submarine Base in Bangor, Washington and served as Contracts Officer for the Base Support Services Contract before accepting his current assignment at Kings Bay. He will provide us with an overview of the construction of both bases.

SPECIAL EVENT:

PRESENTATION OF LIFE MEMBERSHIP CERTIFICATES

SPECIAL FEATURE:

WIDENER COLLEGE AND SPRING GARDEN COLLEGE NIGHT

The ASCE Student Chapters, Faculty and Alumni of the Civil Engineering Departments will be honored at this meeting. All students, faculty and alumni are cordially invited to attend.

About Our Speaker

Captain James M. Greenwald was commissioned an Ensign in the Civil Engineers Corps in 1960, following graduation from the United States Naval Academy. After a brief assignment in construction administration in the Philadelphia District Engineering Office, he attended Rensselaer Polytechnic Institute, graduating in 1962 with a Bachelor of Civil Engineering Degree. Captain Greenwald received a Master of Science Degree from the Massachusetts Institute of Technology in 1968, and attended the Armed Forces Staff College in Norfolk, Virginia.

Other duty assignments have included three years at the Naval Station, Rota, Spain; two years at the Navy's Engineering Field Division in Boston; and two years as Planning and Housing Officer at the Great Lakes Naval Base in Illinois. He completed two deployments to Vietnam as the Operations Officer of Naval Mobile Construction Battalion Eight. He served two years in the Office of the Secretary of Defense and was Recorder for the Navy Real Property Steering Group in the office of the Secretary of the Navy.

TECHNICAL GROUP ACTIVITIES

Hydraulics and Sanitary

April Meeting

Date: **Wednesday, April 21, 1982**

Luncheon 12:30 p.m.—Engineers' Club

Meeting 1:00 p.m.

Subject: **Water Treatment Plant Expansion**

Speaker: **C. Michael Elliott**, Senior Project Engineer, O'Brien & Gere Engineers, Syracuse, N.Y.

Program Host: **Dana R. Pizarro**, Chairman, Hydraulics and Sanitary Group

Innovative application of treatment processes doubled the capacity of the Lake Ontario Treatment Facility while eliminating waste alum sludge discharge to Lake Ontario. Expansion work involved conversion of plant from conventional flocculation/setting/filtration to high-rate direct filtration and natural freezing/thawing to eliminate waste alum sludge. This design received the ACEC Engineering Excellence Awards Program "National Grand Conceptor" Award in 1981.

—o—

Transportation and Urban Development

April Meeting

Date: **Wednesday, April 7, 1982**

Engineers' Club—Cocktails 5:30 p.m.

Dinner 6:30 p.m.—Meeting 7:15 p.m.

Subject: **"CLASS TRANSIT—The MARTA System"**

Speaker: **James L. Lammie**, Senior Vice President and Regional Manager, North Atlantic Region, Parsons Brinckerhoff Quade & Douglas, Inc.; formerly Project Director, Parsons Brinckerhoff/Tudor, General Consultants to The Metropolitan Atlanta Rapid Transit Authority

Program Host: **David Novick**, Chairman, T & UD Group

(continued on page 3)

Please call Mr. deKovacs at the Engineers' Club immediately (215 735-5234), for reservations.

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

!!The Annual Spring Social!!

SATURDAY, MAY 1, 1982

ENGINEERS' CLUB

1317 Spruce Street, Philadelphia

for your listening and dancing pleasure — the music of
GREG ANTON AND HIS ORCHESTRA

COCKTAILS: 6:30 to 7:00 P.M. (Cash Bar)

DINNER: FILET MIGNON 7:00 P.M.

COME JOIN YOUR FRIENDS FOR FUN

Call or Send for your Tickets Today . . . Guests Welcome

— \$18.00 per person —

Please make checks payable to Women's Auxiliary, ASCE and send for tickets to:

MRS. WALLACE A. (Joan) RUTECKI

7112 Pennsylvania Avenue, Bywood, Upper Darby, PA 19082
(215) 352-3746

THE PRESIDENT'S MESSAGE

Where have the winds of Winter gone? It seems like yesterday that I wrote the President's Message starting the new season of the Philadelphia Section. Here it is April and I am writing the final message as my term comes to an end.

In reviewing this the 69th year of the Philadelphia Section, I feel some degree of satisfaction in achieving our goals set at the beginning of the year. Due to a vigorous Program Committee, our monthly meetings have been stimulating and well attended. We have obtained a dynamic Chairman of the Transportation and Urban Development Group and by reuniting the Structural and Construction Groups have achieved one active, strong group whose interests are closely related. All of our Technical Groups are now very active under their respective chairmen and we can all be proud of their accomplishments.

Plans for the ASCE National Convention scheduled for the Spring of 1983 are coming along extremely well and in fact, the National Convention Committee is well ahead of schedule.

Our Membership Committee has been quite active and we have every hope of reaching the goal set in my original President's Message of an increase of 5 to 10 percent in Section membership.

All of the above accomplishments are due to our hard-working Board Members and Committee Chairmen who have given me their splendid cooperation. On behalf of the Section, and on my own personal behalf, I should like to thank them most heartily and sincerely. I have intentionally neglected to single out individuals because the list of names would be too long for the limited space available to me and because I might inadvertently omit some names — but, ladies and gentlemen, thank you very much.

On closing, I should like to extend the Section's best wishes to our next President, Bernard McNamee, and to assure him of our continued support. Our Section will be in good hands and will be even more productive and active under his leadership.

I look forward to seeing you all at the Spring Social in May.

Sincerely,

FREDERIC ROLL, *President*
Philadelphia Section, ASCE

ceeded is inherent in the highlights of his Presidency that he lists in his Message, above.

In surveillance with alert and careful eye, expediting Section business with a capable hand and an astute mind, he guided the Section through a successful year of pride and accomplishment — and we congratulate him for it. And we garner comfort in the assurance that Fred's extraordinary talents will be at the Section's disposal for many years to come.

Did you ever think that a college professor could be such an able and wonderful guy!!!

O.K., College Professor McNamee! We await your Presidency. We challenge you to fill the shoes of that . . . other guy. And, along the way — we'll help you a lot. Good luck!

PHILA. SECTION, ASCE OFFICERS 1981 - 1982

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Editorial

" . . . To Maintain a Level of
Excellence . . . "

With these eloquent words, newly inaugurated 1981-1982 Phila. Section Pres-

ident, Dr. Frederic Roll, last fall pledged his ultimate efforts, not only to preserve and extend the standards of excellence set by his predecessors, but to achieve even higher objectives. That he suc-

NOMINATIONS FOR OFFICE 1982 — 1983

In accordance with the Constitution and By-Laws of the Philadelphia Section, ASCE, the Nominating Committee appointed by President Frederic Roll has submitted the following slate of nominees for elective office for 1982-1983: (The slate was announced at the March 9, 1982 Section Dinner Meeting).

President —

Bernard M. McNamee (one year)

1st Vice-President —

William M. Malarkey (one year)

2nd Vice-President —

John E. Durrant (one year)

Secretary —

Albert M. Tantalala (two years)

Assistant Secretary —

Edward Lutz (two years)

Treasurer —

Charles J. Denny (two years)

Director —

Klaus Fueulleborn (two years)

Director —

Dennis Mohan (two years)

Director — Ira Pierce (two years)

Director — Reading Branch representative appointee to be announced.

Offices in which incumbents have one more year to serve are:

Membership Secretary —

David M. Barr, III

Directors —

Francis J. Depman, Jr.

Thomas J. Lauer

Charlene O'Connor

Past Presidents to serve on the Board of Directors are:

Kenneth J. Zitomer

Joseph R. Szymick

Frederic Roll

If no additional nominations have been submitted to the President in accordance with the Section's Constitution and By-Laws by April 1, 1982, the above slate of nominees shall be declared elected at that time and will be installed at the Annual Spring Social at the Engineers' Club May 1, 1982.

The Nominating Committee included: Joseph R. Szymick, Chairman; Sidney Robin, Charles E. Roller, Jr., Bernard M. McNamee, and Thomas J. Lauer.

TECHNICAL GROUP ACTIVITIES

(continued from page 1)

May Meeting

Date: Thursday, May 20th, 1982

at: The Franklin Research Center of the Franklin Institute

20th & Race Streets, Philadelphia

Lunch at Noon; Speaker and tour of facility at 12:30

FEBRUARY MEETING

February 9, 1982 Engineers' Club

A small but hardy group of Members and guests braved the threatening winter elements earlier in the day to attend and enjoy the Phila. Section's February Dinner Meeting, which featured an enlightening talk on the subject: "Computers and the Civil Engineer." The speaker was **Bruce W. Maddock**, Marketing Manager, Scientific Processing, Major Systems, Worldwide Marketing, Sperry Univac Corp., Blue Bell, Pa.

Swarthmore Attends

The meeting was scheduled to honor the ASCE Student Chapters and Civil Engineering Departments of Swarthmore College, the University of Delaware, and Princeton University. Swarthmore was the only school which sent representatives, led by veteran Faculty Advisor, **Prof. Joseph M. Willis**. Also attending were Contact Member **Richard E. Mabry**, ASCE Student Chapter Representative **Lynn Fryer**, and several Student Chapter members and C.E. Faculty. All acknowledged Prof. Willis' introductions.

Professor Willis thanked the Phila. Section for honoring Swarthmore. He described briefly present and planned activities of the C.E. Department; and he is pleased to report increased enrollment in the College of Engineering, including civils. With tongue in cheek, he expressed some relief that the women engineering students are this year approaching more average scholastic status with the men. Although outnumbered 1 to 4 in engineering by male students, women have been named outstanding student for the past several years. Congratulations to the ladies!!

Prof. Willis described a compulsory course in Computer Design Technology for seniors recently introduced in the Civil Engineering curricula.

Mr. Maddock and the Computers

The age of computers dates from the 1940's and our speaker **Bruce W. Maddock**, has been working with them since 1962. He illustrated with slides the history and evolution of the magic ma-

chine, principally at M.I.T., from the early cumbersome and awkward models to the sophisticated, compact and exotic instruments of today. He explained the research in hardware, structural design programming and general civil engineering computer jargon.

The Genesis of ICES

ICES (Integrated Civil Engineering Systems) was born at M.I.T. in 1964. Mr. Maddock described the STRUDL component of ICES (Structural Design Language). ICES has become so popular, its use has spread throughout the world, informed Mr. Maddock. For many years he sat on the International Board of Directors on the use of ICES. The M.I.T. Program has exerted a profound effect on civil engineering procedures worldwide.

COGO and Surveying

Mr. Maddock detailed the computer program method for solving problems of coordinates in surveying, defining structures, earth surfaces; and subsurface substances and materials such as rock, soil and minerals technology. The system is known as COGO (Coordinate Geometry). He illustrated roadway and shoulder-bank COGO design components in Geographic Based Land Information Systems.

Other civil engineering elements which can be readily programmed, measured and catalogued using the system include: storage of data; storing by category; topographical and geographical mapping; structural deflections of rigid frames, in three-dimensional modes such as towers and general structural systems in STRUDL.

Versatility in Civil Engineering

Many modern computers are capable of complex procedures affecting and prominent in the civil engineering profession, said Mr. Maddock. These include: pipeline processing and design; graphics, such as time-sharing systems, finite elements, etc.; two and three-dimensional models or in-line drawing and color-tone images indicating stress patterns and intensities. Research in these areas is proceeding apace at many universities in the U. S. and abroad, said our speaker.

Mr. Maddock showed a very interesting group of computer graphic development slides — stereoscopic images at the Jet Propulsion Laboratory of N.A.S.A., the Los Alamos Scientific Laboratory, and the Naval Ocean Systems Center. Also intriguing were simulation studies showing component analyses of bridges, buildings, tunnels and aircraft

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Subject: State of the Art Technology for the Transportation Function

Speaker: David Humphreys, P.E.;

Director Systems Engineering

Program Host: David Novick, Chairman, Transportation and Urban Development Group

Please contact Anne Marie Collins at (215) 988-0696, Ext. 15 (Mr. Novick's office) for information and reservations.

FEBRUARY MEETING

(continued from page 3)

frames. "... improvements to programming techniques have not kept pace with demand", proclaims Mr. Maddock.

What the Future Holds

Mr. Maddock is optimistic in projecting the trends of the future for the computer technology in civil engineering. He predicts great advances in uses such as preparation of reports, graphics, software packaging, ease of use in voice synthesis and recognition, knowledge-based systems combining elements and alternatives of structural systems.

Informality Reigns

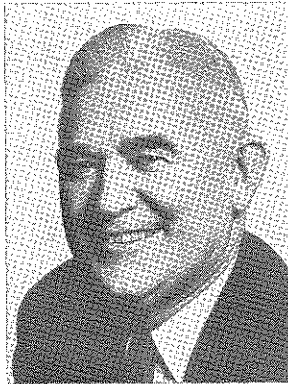
Although there was a "formal" question and answer period at the conclusion of Mr. Maddock's address, the small audience lent itself to an atmosphere of informality during his presentation. Questions were called out by the members of the audience and Mr. Maddock graciously responded to them all.

Mr. Maddock was a well-informed and articulate speaker. His excellent presentation was educational and rewarding, and the Phila. Section congratulates him for a great job.

Section President Fred Roll presented Mr. Maddock the Section's Certificate of Appreciation and a copy of the 1976 Bicentennial ASCE Annual ASCE Convention Commemorative Book published by the Phila. Section: "The History of Civil Engineering and Construction in the Delaware Valley."

**GEOTECHNICAL GROUP
PROCEEDINGS**

Dr. Ziyad I. Husami, Chairman, announces that the Geotechnical Group, Philadelphia Section, ASCE, has published the proceedings of its Twelfth Annual Lecture Series on **Geotechnical Aspects of Energy**. The volume includes papers on Siting of Hydroelectric Power Plants (W. F. Swiger), Geophysical Prospecting (R. N. Specht), The Geotechnics of Underground Mining for Fuels (T. D. O'Rourke), Geotechnical Considerations in Surface Mining (W. N. Heine), Geotechnical Aspects of Offshore Drilling and Production Platforms (M. S. Glasscock), Monitoring by Acoustic Emission in Energy Projects (W. M. McCabe) and, as a case history, Geotechnical Considerations for the Trans-Alaska Pipeline (W. W. Moore). The price is \$15.00 for individuals and \$25.00 for libraries and institutions. Please make checks payable to: **Z. I. Husami, Stone & Webster, P.O. Box 5200, Cherry Hill, NJ 08034.**

SAMUEL S. BAXTER

With the death of **Samuel S. Baxter** on February 7, 1982, at the age of 77, the professional engineering community of the United States and the World lost a giant of a man. But his roots were in Philadelphia — and his mark is forever engraved in these environs. To the Philadelphia Section — as to the National Society, ASCE, his stature and eminence are unmatched. His talents and endeavors transcended his great technological accomplishments as one of the foremost public works servants in the history of the City of Philadelphia. At his alma mater, Drexel University, he was a Trustee for many years and was recognized by that institution in 1967 with the Honorary Degree of Doctor of Engineering. He was also a Trustee of Methodist Hospital; Officer of the Somerton Methodist Church; Chairman of the Board, East Girard Savings and Loan Association; Chairman of Disaster Services, Southeast Pennsylvania Chapter, American Red Cross; Past President, Philadelphia Council, Boy Scouts of America; Past Chairman, United Fund's Torch Drive.

Mr. Baxter was the recipient of numerous awards from civic groups, including a coveted public service award from the Philadelphia Junior Chamber of Commerce.

Public service and professionalism are Sam Baxter's legacy. Government administrations of both major political parties — and millions of citizens of Philadelphia have reaped the dividends of his brilliant transformation of the City's deteriorating water supply and wastewater systems — long outdated by neglect and lack of improvements — and built them into modern public utility operations, when he was appointed Commissioner of Water in 1952 by a progressive new City Administration. He headed a self-sustaining facility blessed with adequate funds to do the job. Because of Sam Baxter's accomplishments,

a former U.S. Secretary of the Interior has proclaimed Philadelphia's water supply system a model for other communities in the United States.

Sam's professional career in Philadelphia municipal service began in 1923 in the old Department of Public Works, where he was named Assistant Director in 1940. During World War II he was on leave — as a Major in the Corps of Engineers — for work on the Manhattan Project. He returned to Philadelphia to become Chief Engineer in 1950, and Commissioner of Water two years later. He dedicated the greater portion of his public service, to the almost miraculous conversion of an obsolete, inadequate, obnoxious smelling and tasteless water and sewage system into the enviable, modern water supply and pollution control plant which Philadelphia boasts today.

Mr. Baxter's formidable list of professional organization affiliations included: American Society of Civil Engineers (Past National President and Past President of Phila. Section); American Water Works Association (Past National President); American Public Works Association (Past National President); Pa. Society of Professional Engineers (Past President, Phila. Chapter); American Society of Public Administration (Past President, Phila. Chapter); Delaware Valley Engineer of the Year, 1959; President of Engineers' Club of Philadelphia, and recipient of the Club's highest honor, The George Washington Medal in 1967.

We could record Sam Baxter's achievements here in pages and pages of archives. These have been listed in many professional and civic publications. But the Philadelphia Section, ASCE requires no detailed documentation of his qualities. He was an integral part of us. His calm, quiet-mannered and distinguished presence commanded the attention and respect of all with whom he came in contact. His brilliant talents as a public speaker and master of ceremonies at countless Phila. Section functions are ingrained in our history. His technical expertise in engineering, economics and finance placed him in a unique position as consultant to government, industry, engineering firms and individuals, when he established his private practice after retiring from public service in 1972. For all these achievements and abilities he will be remembered. But above all he will be remembered as — a great man.

To Sam Baxter's beloved wife, Nor-
(continued on page 5)

SAMUEL S. BAXTER

(continued from page 4)

ma, a Charter Member of the Phila. Section's Women's Auxiliary, who was ever at his side, ready to help him in every endeavor, and to his son **Richard** and daughter **Linda**, we extend our heartfelt condolences. As he rests in peace, may Sam Baxter's family's grief be solaced, to the extent that it can be, by the assurance that his wonderful memory will ever remain with us, his friends and associates — as it will with them, his loved ones.

MEMBERS IN THE NEWS

Phila. Section Past President **Kenneth J. Zitomer**, Former Acting Commissioner and Chief Engineer, Water Department, City of Philadelphia, has retired from the Department after 28 years of active service.

Ken has established a private Consulting Engineering Practice, operating at 6340 N. 7th St., Phila., PA 19126 - (215) 548-5324.

—o—

Past Section Director **Allan R. Ritchie**, former Vice President of Site Engineers, Inc., Voorhees, N. J., announces the recent formation of his new Consulting Engineering firm, **Ritchie Engineers, Inc.** The firm offers subsurface investigations, airfield engineering, site engineering, groundwater hydrology, distressed structures analyses, sanitary landfill consultation, construction claims services, expert witness and legal testimony.

The offices are located at 276 Merion Avenue, Haddonfield, NJ 08033, Phone: (609) 354-0733.

—o—

David Novick, Chairman of the Phila. Section Transportation and Urban Development Group, recently delivered the Crom Lecture at the Department of Civil Engineering, University of Florida at Gainesville. The subject of the lecture was: "The Challenge of Multidisciplinary Design Teams."

—o—

John J. Lotz, of Abington, Pa., President of Lotz Designers, Engineers and Constructors, Inc., Horsham, Pa. was recently installed for a one-year term as First Vice President of the General Building Contractors Association, Inc. (GBCA). The 300-member organization serves as spokesman for the commercial, industrial and institutional building construction industry in the Metropolitan Philadelphia area, including Philadelphia, Bucks, Chester, Delaware and Montgomery Counties.

MEMBERSHIP DRIVE OPENS

1982 is ASCE membership year and the Philadelphia Section has opened a campaign to invite as many prospective members as possible to join the Society. With the recent institution of the new membership grade called Student Member, a CE student can enjoy all the benefits of membership at only \$5.00 per year. Upon graduation and payment of their Associate Membership dues, Student Members will move to Associate status without a cumbersome application process.

Two approaches are being taken to contact prospective members. The Civil Engineering Departments of Villanova, Penn, and Drexel will participate by promoting ASCE to their students and by helping the Philadelphia Section to contact their alumni. In addition, point-of-contact persons have been organized in many of the major places of employment to provide information and application to prospective members. Listed below are the contact persons who will be participating in the drive.

Dennis Mohan	United Engineers (Philadelphia)	215 422-4917
Jim Robinson	United Engineers (Valley Forge)	215 964-1300
Klaus Fuellerborn	Permoni Assoc.	215 561-0460
Dana Pizarro	O'Brien & Gere	215 534-4282
Dave Novick	Philadelphia Transit Cons.	215 988-0696
Ziyad Husami	Stone & Webster, NJ	609 482-3889
Harold Byer	EPA	215 597-3527
Ira Pierce	DVRPC	215 567-3000
Robert Wright	Philadelphia Streets Dept.	215 686-5538
Tom Laurer	Philadelphia Water Dept.	215 365-5166
John Durrant	Philadelphia Water Dept.	215 686-1776 X23-246
George Bathish	Widener College	215 499-4000
Lou Mathers	Villanova University	215 645-4959
Bernie McNamee	Drexel University	215 895-2364
Fred Higgins	Temple University	215 787-7959
Fred Roll	University of Penn.	215 243-8347
Bruno Talvacchia	Philadelphia Public Prop.	215 686-8641
Edwyn Shoemaker	Hudson Engineers	215 564-5100
Vic Marcus	Philadelphia Naval Shipyard	215 755-3282
David Barr	Naval Facilities Engineering Command	215 755-4805

If you are interested in serving as a point-of-contact person in your place of employment, please contact Membership Secretary **David Barr**, (215) 755-4805. He will send you a notice to post on bulletin boards and a supply of application forms.

Howard G. Minckler was recently installed as a Director of the Contractors Association of Eastern Pennsylvania.

—o—

A. Carl Helwig announces the opening of new offices, under the professional title of **Heron Associates**, at 603 Heron Drive, Bridgeport, N. J. 08014, for the practice of developing, leasing and operating various lands and buildings.

The Philadelphia Section congratulates the above members on their important appointments, and scholastic, and business endeavors, and wishes them all success.

WOMEN'S AUXILIARY

April Meeting

The Philadelphia Section's Women's Auxiliary April Luncheon-Meeting is a rescheduled one which was cancelled last year because of the transit strike. It will take place on **Wednesday, April 21, 1982, at 12:00 noon, in the Main**

Building of Drexel University (N.E. Corner 32nd and Chestnut Streets, Philadelphia), Third Floor Picture Gallery. An exhibition of "New Materials in Sculpture" will be presented by **Professor Bernard Brenner**, of the Dept. of Humanities and Communications, of Drexel University.

This promises to be a very stimulating experience. All Auxiliary Members and their guests are cordially invited to attend.

May Meeting at Whitemarsh

The final Auxiliary function of this season is the popular Luncheon-Meeting at the **Whitemarsh Country Club, Lafayette Hill, Pa., on Wednesday, May 19, 1982, 12:00 noon.** New officers for 1982-1983 will be installed. The principal speaker is none other than the 1981 Engineer-of-the-Year, husband of the President of the Women's Auxiliary, Past President of the Phila. Section. Have you guessed who? Yes, it's **Bob**

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STUDENT CHAPTER NEWS

Villanova Happenings

By: Ross Lodato, President

The newly elected Villanova University ASCE Student Chapter Officers for 1982 have been planning a well-rounded schedule for the remainder of this school year. The new officers are:

President Ross Lodato
 Vice-President Pat Kinsley
 Treasurer Steve Kellner
 Secretary Laurie O'Donnel

The Spring semester of 1982 has been very productive. During the last couple of months, the Chapter had many interesting seminar speakers. Our first meeting, co-sponsored with the Student Chapter of the Institute of Transportation Engineers, featured Jeff Greene from PennDOT. He gave a fine presentation on the plans for renovation of the Schuylkill Expressway.

Villanova's 13th Annual Career Conference was held on February 23. Chapter sponsored speakers who added to the success of the Conference were Raymond Kane from Weston Inc. who spoke on Toxic Waste Management; Steven Schorr from Town Engineers who spoke on Traffic Reconstruction; and John D. Pillsbury of Robert E. Lamb Inc. speaking on Construction Management. Students who attended found the seminars to be educational and interesting.

Our Chapter is presently in the early stages of preparing our concrete canoe for the races being held April 24th, 1982 at Lehigh University. Chairman of the Canoe Committee, **Joseph Estock**, hopes to have the design that will bring Villanova a big victory.

Socially, our Chapter has held two TGIF's ("Thank God It's Friday"). It is a chance where students as well as professors are able to convene and talk outside of the classroom.

We look forward to the Spring when our Chapter can challenge other Chapters to athletic events.

WOMEN'S AUXILIARY

(continued from page 5)

Koerner, whose subject will be "Trouble Below — Ground Failures Involving Civil Engineering Structures."

Guests are welcome to all Auxiliary events. For reservations to both the April and May Luncheon-Meetings, please call **Mary Ellen (Mrs. Warren R.) Van DeVort - (215) 483-0714, AND OF COURSE, EVERYBODY WHO IS ANYBODY WILL BE AT THE ANNUAL SPRING SOCIAL AT THE ENGINEERS' CLUB ON SATURDAY, MAY 1, 1982!!!!**

TIMBER PILING SEMINAR

Dr. George Goble, Chairman of Civil, Architectural and Environmental Engineering at the University of Colorado, will present a seminar on Timber Foundation Piling at the Engineers' Club of Philadelphia on Friday afternoon, May 21, 1982.

The purpose of the seminar is to update engineers on recent developments in the use of timber foundation piling. The meeting will start at 12:30 p.m. with a lunch. There will be a charge of \$10.00 to cover the cost of lunch and notes. For further information and reservations, please call Jim Graham, AWPI, collect at (914) 835-2755 or write him at 446 Park Avenue, Rye, NY 10580.

RUTGERS HOSTS SYMPOSIUM

In connection with the dedication of its new Civil Engineering Laboratory building, Rutgers University will host a two-day Symposium on Wednesday, May 19 and Thursday, May 20, 1982, entitled "International Conference on Civil Engineering Education and Research for Practice in the 21st Century". The idea of the conference is to bring together a mix of eminent educators, researchers, and practitioners — people at the forefront of their respective fields — to present papers and exchange views on the appropriate directions to be taken by Civil Engineering education in this time of tremendously rapid social and technological change.

The conference schedule will include four 3-hour sessions, two luncheons, and a dinner meeting. The session themes are "Structural Engineering", "Geotechnical Engineering", "Environmental and Water Resources Engineering", and "International Aspects of Civil Engineering Practice". Each session will involve three formal papers followed by an open panel discussion. Among the distinguished engineers who will present papers are:

Roger E. A. Arndt, Director, St. Anthony Falls Hydraulic Laboratory, University of Minnesota; Lynn S. Beedle, Director, Fritz Engineering Laboratory, Lehigh University; Edward Cohen, Managing Partner-Chairman, Amman and Whitney, Past President, American Concrete Institute; Henry J. Cowan, Professor of Architectural Science, University of Sydney, Australia; Richard T. Dewling, Acting Regional Administrator, Region II, U. S. Environmental Protection Agency; W. Wesley Eckenfelder, Jr., Distinguished Professor of Environmen-

MARCH MEETING

March 9, 1982

Engineers' Club

Editor's Note: Because the March Section Meeting occurred just as this final Spring, 1982 issue of THE NEWS was going to press, a detailed summary of the meeting is not included here. It will be reviewed more completely in the next issue, tentatively scheduled for September, 1982, unless circumstances dictate a special issue this Summer.

The well-attended meeting experienced a splendid presentation, employing an exotic and unique visual bank of sixteen slide projectors, operating in tandem synchronization, producing an exciting effect, accompanied by an excellent sound tape. The subject was: "The Interstate Success Story — Highway Planning in the City of Baltimore," and the speaker was **William K. Hellman, P.E.**, Mayor's Transportation Coordinator.

In keeping with the Section's established policy of recognizing Civil Engineering schools in the area, the meeting honored the ASCE Student Chapter, alumni and faculty of the Department of Civil and Urban Engineering, University of Pennsylvania. A delegation of more than 30 U. of Pa.'s Civil Engineering school representatives attended.

tal and Water Resources Engineering, Vanderbilt University; Gerard F. Fox, Partner, Howard, Needles, Tammen & Bergendorff; Fazlur R. Kahn, Partner, Skidmore, Owings & Merrill; T. Y. Lin, Chairman of the Board, T. Y. Lin International; James K. Mitchell, Chairman, Department of Civil Engineering, University of California, Berkeley; Roy E. Rowe, Director-General, Cement and Concrete Association, Wexham Springs, England; George F. Sowers, Regents Professor of Civil Engineering, Georgia Institute of Technology; Joseph S. Ward, President and Chief Executive Officer, Converse Consultants, Past President, American Society of Civil Engineers.

There is a registration fee of \$50.00, payable to Rutgers Department of Civil Engineering. The fee includes the cost of the two luncheons, the conference banquet, and the conference Proceeding's which will be sent to each registrant.

For further information contact:

Professor D. J. Butler
 Department of Civil and Environmental Engineering
 Rutgers University
 P.O. Box 909
 Piscataway, New Jersey 08854
 Telephone (201) 932-2232

**WHAT THEY SAID —
WHAT THEY MEANT**

Editor's Note: The following was brought to the attention of THE NEWS by Past President **James W. McPhillips**, and is abstracted from a recent issue of the APWA REPORTER.

THE MOST COMMON WRITTEN words are (in order): the, of, and, to, a, in, that, is, I, it, for, as. However, as we read many of the papers that cross our desks, it seems as if the most common words are: institutionalize, systematize, prioritize, synchronize, interface, impact, transitional, incremental, capability, contingency, and that's only a few. Really, there's nothing wrong with those words. It's just the way some writers string them together in an effort to impress when they should be writing to inform. This annual session on what they said and what they meant — drawn from papers, articles, and letters — is presented with the goal of persuading all of us to write more clearly.

What they said: In accordance with federal user charge regulations promulgated pursuant to the Clean Water Act of 1977 (Public Law 95-217), the Sanitary District is hereby providing notice of the portion of total ad valorem tax payment to the district used for wastewater treatment services. The wastewater treatment service portion equals 58% of the total ad valorem tax paid to the district.

What they meant: The law requires us to notify you that 58% of the property taxes you paid to the Sanitary District is used for wastewater treatment.

What they said: As you probably know, the state is not presently in what I would call a hiring mode.

What they meant: There are no positions open now.

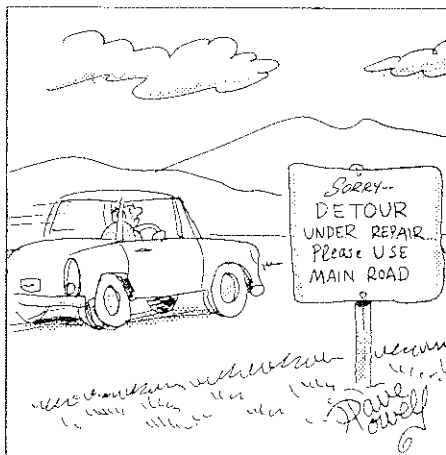
What they said: Your consideration of our requests would be greatly appreciated. If there is any symbiotic endeavor we may be able to consummate, we welcome your communication with us to that effect.

What they meant: If we can work together on a project, please write or call.

What they said: In addition, Organization will provide ERISA-related advice, which we in Washington, D.C., are uniquely privy to.

What they meant: We have the knowledge to advise you about ERISA.

What they said: I said, I think, to



somebody last night, that was consciously ambiguous, that statement, consciously ambiguous in the sense that any terrorist government or terrorist movement that is contemplating such actions I think knows clearly what we are speaking of.

What they meant: Terrorists know where we stand.

What they said: It is the opinion of that in regard to the matter of the recognition of seniority rights for certain classes of workers, flexibility sufficient to avoid the detriments inherent in a mandatory pre-emptive seniority requirement must be maintained.

What they meant: We recommend against the use of seniority because it is too rigid.

What they said: An effective performance at home in the 1980s requires an elevation of the old, deeply rooted capacity of Americans to cooperate for common ends above their equally ancient capacity to compete with each other as rivals.

What they meant: For the common good, people in older cities and those in the sunbelt should cooperate.

What they said: 1,650,763.73 times the wavelength in a vacuum of the unperturbed transition (2p10-5d5) of Krypton 86.

What they meant: One meter.

What they said: If the systematized responses can be integrated into a compatible whole, we anticipate a result of several published outputs.

What they meant: We plan to publish the results.

What they said: Please arrange your schedule so that you will be in attendance.

What they meant: Please attend,

PLEASE PAY SECTION DUES!!

When you pay the \$10.00 Phila. Section annual dues, you become a full Active Member and are eligible to reap the benefits of the many professional services and prestige which that classification provides.

In addition, your payment of Section dues significantly helps the Section in its ongoing search for revenues to finance its numerous and varied programs. National ASCE allots \$3.00 for each assigned member who pays the Philadelphia Section dues.

In a policy initiated in 1979 ASCE National Headquarters will include Philadelphia Section dues in its National billing. In this way, your one check will pay both National and Local Philadelphia Section dues. (National ASCE will reimburse the Phila. Section for the Local dues). **You will receive your bill from National ASCE, with appropriate instructions, shortly after October 1, 1981.** Please send your checks in promptly to National Headquarters in accordance with their instructions.

Another important function of the billing is for Phila. Section members to include their preferences for membership in Technical Groups @ \$1.00 annually per Group. The bill from National will include these choices. The total annual Phila. Section dues will therefore be \$10.00 plus \$1.00 per Technical Group membership.

YOU NEED THE PHILADELPHIA SECTION, ASCE FOR YOUR PROFESSIONAL FULFILLMENT. THE SECTION NEEDS YOUR SUPPORT CONTINUOUSLY. IT ALSO THANKS YOU FOR YOUR PARTICIPATION AND COOPERATION IN ALL ITS PROGRAMS AND ACTIVITIES.

SMALL BUSINESS CONFERENCE

The Small Business Administration and the Commonwealth of Pennsylvania are sponsoring a **Small Business Procurement Opportunity Conference at the State Farm Show Building, Harrisburg, Pa. on May 4-5, 1982.** Co-sponsoring this conference will be the United States Senators and the Congressional Delegation from Pennsylvania.

For additional information and a pre-registration brochure please phone 717-782-3824/3847 or write to James P. Guyer, Branch Manager and Conference Co-Chairman, c/o Small Business Administration, Harrisburg Branch Office, 100 Chestnut St., Suite 309, Harrisburg, PA 17101 at the captioned address.

1982 ASCE SUBSCRIPTION PRICES

The following are the 1982 prices for ASCE periodicals. The journal rates are for a calendar year (1982) subscription. The **Civil Engineering Magazine** rate is for a new or renewal subscription starting with the January, 1982 issue or later.

Publication	Non-Member	ASCE Member	Foreign* Postage	Single Issue
Civil Engineering	\$ 36.00	—**	\$ 7.00	\$ 5.00
Geotechnical	\$ 56.00	\$ 16.00	\$ 4.50	\$ 6.00
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Publications Abstracts & 1982 Combined Index	\$ 47.00	\$ 17.00	\$ 4.50	\$ 9.00
1981 Combined Index	\$ 20.00	\$ 15.00	\$ 1.50	
1981 Transactions (Vol. 146)	\$ 52.50	\$ 15.00	\$ 2.00	

*The indicated foreign postage surcharge should be added to all ASCE Member and nonmember subscriptions with the exception of ASCE Member subscriptions to **Civil Engineering** magazine received as a part of ASCE membership. The foreign postage surcharge applies to subscriptions sent outside the United States and Possessions.

ASCE Members receive one gratis subscription to **Civil Engineering magazine as part of their membership. Additional subscriptions must be ordered at the Non-member rate. **Student chapter members may order an annual subscription for \$18.00.**

THE DOCTOR GAP

Editor's Note: The following editorial is reprinted from the February 25, 1982 edition of *Machine Design*. It was recommended by Section Secretary Al Tantala.

Almost any time during the past 25 years, you could trigger a spirited discussion in any circle of engineers by merely mentioning "engineer shortage."

Points of view were defended vigorously, running the gamut from "It's a phoney issue trumped up by the colleges to keep their classrooms full!" to the less emotional "If we don't solve it, we'll lose our edge to the Russians and they'll get to the moon first."

The discussion seems to be heating up again, at least in the press and in academic circles.

The engineer shortage this time is directly affecting academia. Facilities are being depleted, and graduate schools are not turning out enough Ph.D.s to fill vacancies.

• Annual output of engineering Ph. D.s declined by nearly 50%, from 3000

to 1800, in the period 1970-80.

• In 1980, engineering-faculty vacancies reached 10% of 16,200 authorized positions in 244 accredited schools.

• The number of engineering undergraduates exceeded 365,000 in 1980; annual output is now 60,000.

Deans and administrators seem to be emphasizing the vital need for Ph.D.s who are willing to accept the satisfactions, hassles, and modest salaries of campus life. However, whether the quality of engineering education will deteriorate significantly because of a lean mixture of Ph.D.s on campus is still to be demonstrated. After all, on-the-job experience counts too.

Granted, the larger the Ph.D. count, the more numerous the faculty R&D contracts. What's more, the Ph.D.-rich university stands a better chance of moving into the exalted Best-Ten ranking.

Nevertheless, like many of our engineer friends, we seem to recall at least as many really good teachers who answered to *Mister* as to *Doctor*. But that's a matter for the Deans to worry about.

ASCE DUES BILL AND TECHNICAL GROUP DETAILS

Section members will notice in the 1982 dues bill received recently from National ASCE Headquarters, that the PHILADELPHIA (SECTION) DUES is itemized as \$11.00. This amount includes a \$1 assessment for membership in one Phila. Section Technical Group of your choice. **If you choose to be a member of more than one Group, please add \$1.00 for each Group.**

Also, because National's bill did not list the Technical Groups to which your \$1.00 payments were to be applied, you are requested to get in touch with the Chairmen of the Technical Groups of your preference, so that their membership lists can be classified.

The appropriate individuals to contact are the following:

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