

PHILADELPHIA SECTION

AMERICAN SOCIETY OF CIVIL ENGINEERS

1317 Spruce Street, Philadelphia, Pa. 19107

VOL. 52 - 4

OUR 67th YEAR

January, 1980

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JANUARY MEETING

Philadelphia Section, American Society of Civil Engineers

TUESDAY, JANUARY 8, 1980

Engineers' Club, 1317 Spruce Street, Philadelphia

Cocktails - 5:30 P.M.

Dinner — 6:30 P.M.

Meeting — 7:30 P.M.

SUBJECT:

OVERVIEW OF SOIL STABLILZATION/IMPROVEMENT METHODS SPEAKER:

JAMES K. MITCHELL

Professor of Civil Engineering, University of California, Berkeley PROGRAM HOST:

JIMMY C. ALEXANDER, Chairman, Geotechnical Group

Soil stabilization and improvement are being used increasingly in earthwork construction. Methods to be described include, vibro-compaction, vibro-displacement compaction, injections and mix-in-place techniques, and reinforcement using tension and compression elements.



Dr. James K. Mitchell received his B.S.C.E. from Rensselaer Polytechnic Institute in 1951, M.Sc. Degree from the M.I.T. in 1953, and the Doctor of Science Degree, also from M.I.T., in 1953.

Professor Mitchell served on active duty with the U. S. Army as an officer in the Corps of Engineers.

He has been on the faculty at the University of California, Berkeley, since 1958 and is now Professor and Research Engineer. He has authored more than 135 published papers as well as a graduate level text and refer-

ence, "Fundaments of Soil Behavior" (1976). After serving as a member of the Apollo 11 and Apollo 12 Soil Mechanics Investigation Teams, he was appointed Principal Investigator for the Soil Mechanics Experiment for Apollo Missions 14-17, and was responsible for all soil mechanics studies carried out during these missions to the moon.

He has received the Norman Medal, the Thomas A. Middlebrooks Award (three times) and the Walter L. Huber Research Prize of A.S.C.E. and the Medal for Exceptional Scientific Achievement from the National Aeronautics and Space Administration. He was elected to the National Academy of Engineering in 1976.

8PECIAL FEATURE:

DREXEL UNIVERSITY NIGHT

The ASCE student chapter members, faculty and alumni of the Civil Engineering Department of Drexel University will be honored at this meeting. All students, faculty and alumni are cordially invited to attend.

No Dinner Reservation Mailing Cards will be sent until further notice. Please call Mr. deKovacs at the Engineers' Club immediately. (215) 735-5234.

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

NEXT MONTH'S MEETING MARK YOUR CALENDAR

PHILA. SECTION ASCE

Tuesday, February 19, 1980

Engineers' Club

Joint Meeting with Women's Aux.

Dinner Meeting—Cocktails 5:30 P.M.

Subject: The Community Role in City Planning

Speaker: John Mitkus, Exec. Dir., Phila. City Planning Commission Program Host:

> Norman G. Weintraub, Program Chairman Swarthmore College Night

EIT EXAM REVIEW

TEMPLE UNIVERSITY COLLEGE OF ENGINEERING TECHNOLOGY announces the 1980 Engineer-in-Training (EIT) Examination Review Course: WHERE:

Engineering Technology Building 12th and Norris Streets Philadelphia, Pa. 19122

WHEN: Thursday evenings — 6:15 P.M. to 8:45 P.M.

January 10, through April 17, 1980

COST: \$180.00 Tuition and Handout Material

REGISTRATION: January 10, 1980 or Before — in Room 341

FOR ADDITIONAL INFORMATION CALL —

College of Engineering Technology Continuing Education Programs 787-7802 or

Dr. R. J. Stone—(215) 787-7814

EIT Exam will be held at

Temple University on Saturday, April 19, 1980 from 8:00 A.M. to 5:00 P.M.

THE PRESIDENT'S NEW YEAR'S MESSAGE

Sid Robin reminded me that the New Year's Message is due at the printer's December 11, 1979 and here I am, in November, writing the message. It also marks about the mid-point of my tenure in office. I trust that everyone has had a Happy Holiday Season and can reflect on what has happened last year and what achievements we hope to attain in the coming year.

We have had enlightening meetings which have been well attended and the mood seems to be very friendly, informal and informative. Our goals have not changed, but remain the same: the advancement of the Civil Engineering profession, which also means the betterment of the community and the nation. The environmental and energy conservation issues still remain most important, but are now overshadowed by international crises and inflation.

When we read about a so-called environmental group wanting to hold up the operation of a nuclear power plant because of two fish approximately two inches in size being caught in a strainer, it leads us to wonder what the objectives are. Further investigation indicates that one fish was dead prior to being entangled in the strainer and the other would have died had it not been caught in the strainer. Let's get our priorities in order and approach problems in an intelligent, sensible,

At a recent meeting Mr. Gerald M. Hansler, Executive Director, Delaware River Basin Commission, explained the sensible way the Commission is trying to solve environmental and energy problems. We need more input from the Civil Engineering community to help resolve these problems.

The engineering community must actively advise the political and legislative branches so that laws and regulations are not based on emotional reaction.

The Philadelphia Section's officers, committee chairmen and members are working diligently and harmoniously; and I am very pleased to be part of this endeavor. On with the 80's and a Good Year to All!

Sincerely.

KENNETH J. ZITOMER, President Phila. Section, ASCE

IMPORTANT!! Remaining Meeting Dates

THE NEWS is now being mailed at Non-Profit Organization Bulk Rate. While this promises postage savings to the Section, it also runs the risk of much longer delivery time from your local post office to your mail box. Therefore, please refer to your 1979-1980 Section Program Schedule and mark your calendar for all meetings and social functions. Listed below is a summary of remaining meeting dates.

TUESDAY, FEBRUARY 19, 1980 — Section Dinner Meeting —

Engineers' Club

Joint Meeting with Women's Auxiliary -- Swarthmore College Night NOTE: This date for the February meeting has been changed from the original date marked on your pink program card.

Tuesday, March 11, 1980 - Section Dinner Meeting Engineers' Club - Widener College Night

Tuesday, April 8, 1980 - Section Dinner Meeting - Engineers' Club Joint Meeting with Society of American Military Engineers (SAME) University of Pennsylvania Night.

SUNDAY, MAY 4, 1980 - Annual Spring Social - Bala Golf Club CHANGED DATE — (see explanation elsewhere in this issue)

Time schedules for Dinner Meetings at the Engineers' Club are: Dinner — 6:30 P.M. Meeting — 7:30 P.M. Cocktails - 5:30 P.M.

NOTE: NO RESERVATION CARDS WILL BE SENT UNTIL FURTHER NOTICE; PLEASE CALL MR. deKOVACS AT THE ENGINEERS' CLUB — 735-5234 AS SOON AS POSSIBLE.

Mail all copy for THE NEWS to Editor Sidney Robin, 64 Nancy Drive, Richboro, Pa. 18954 - Phone (215) 322-7464. See deadline date, bottom of page 2.

ATTENTION - SECTION MEMBERS

If your job location, business or residential address for mailing is changed; or if you move out of the Philadelphia Section area jurisdiction; or if you do not receive Section mailings (THE NEWS, special notices, etc.), please notify Secretary Albert M. Tantala, c/o Tantala Associates 4903 Frankford Ave., Phila., PA 19124 - Phone: (215) 289-4600.

Continuing Education Courses

An educational activity of the Philadelphia Section ASCE is to provide continuing education courses for the local members. If there is a topic area in which you would like the Section to provide a course, please write to the Committee on Continuing Education, ASCE, Philadelphia Section ASCE, 1317 Spruce Street, Philadelphia, Pa. 19107, Attn.: Dr. Bernard M. McNamee.

PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS OFFICERS 1979 - 1980

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DECEMBER LUNCHEON MEETING

Engineers' Club December 11, 1979 Editor's Note: THE NEWS is indebted to John Durrant, President of the As-

sociate Member Forum, for preparing the body of the following review.

The meeting featured a forthright admission and explanation of ethical wrong-doing - in the form of fee kickbacks - by a Consulting Engineer commissioned to do municipal design work. Alam Kammerer, of Kammerer, Symes and Associates, Medford, N.J., was principal speaker in a dissertation of his personal experiences, on the topic: \$80,000 in Payoffs: An Engineer Tells His Story. The meeting was sponsored and arranged by the Section's Associate Member Forum, whose President, John E. Durrant was the very competent Program Host.

The Investigation Proceeds

By cooperating with the U.S. Attorney and agreeing to be a witness against the county official who had solicited the kick-backs, Mr. Kammerer, although not promised, was finally granted immunity from prosecution. Although granted immunity from criminal prosecution Mr. Kammerer pointed out that this did not mean protection from any actions by the State Registration Board, the professional societies he was a member of or from any civil suits that may be filed based on his testimony. The result of the three day trial, which was held during November of 1972 in Camden, N. J., was a two year prison term for the county official who had solicited the kick-backs and extensive bad publicity for Mr. Kammerer and his firm. In addition, a civil suit was filed against Kammerer's firm by the county freeholders. Other repercussions included a six month suspension of Mr. Kammerer's license to practice; and a three year suspension from the A.S.C.E. later reduced to two years.

As it turned out it was an offer Mr. Kammerer made himself when he appeared before the Society's Board that besides helping his firm stay free from bankruptcy, also allowed him to be the recipient of many intangible and nonfinancial rewards. That offer to "use me in any way you saw fit to educate young engineers" has brought Mr. Kammerer into contact with many engineering students that have undoubtedly learned from his unfortunate situation.

Lessons in Morals and Ethics

Those lessons which Mr. Kammerer suggested could be learned from his experiences include the importance of not sacrificing sound engineering principles

(something he never had to do), that something which seems necessary for good business may not be morally or ethically right, and the value of good documentation. The speaker also emphasized that membership in the A.S.C.E. was well worth the trouble of appearing before the Society's Board to retain. As Alan Kammerer explained, it is through membership in the society that a Civil Engineer is able to keep abreast of developments in his field. Mr. Kammerer pointed out that today through the Committee on Professional Conduct the Society has a place for an engineer confronted with an ethical conflict to turn with confidence.

Audience Sympathetic

It was noteworthy that Mr. Kammerer received a very cordial audience, who were hospitable, considering the sensitive nature of the subject. The Philadelphia Section was appreciative of this very courageous engineer. Alan Kammerer when asked after his presentation whether an individual engineer confronted with an illegal situation should "blow the whistle" answered with an unequivocal yes which perfectly summarized his very candid presentation,

Mr. Kammerer presented a frank, straightforward and unclouded explanation of the terribly traumatic ordeal and the effects on his professional and private life.

He does not waiver in his admission of guilt in the case — but he flinches at the gross ill-treatment he has received from the press and other media. Indeed, political organizations and individuals solicit contributions from him and his firm - but suggest that the gifts be recorded surreptitiously so as not to implicate themselves with Mr. Kammerer's past indiscretions. Mr. Kammerer enunciated in detail the sacrifices, penalties and indignities he has suffered since the ordeal began in 1967. His life is affected by it to this day, because the case is still in litigation and discussion among his professional affiliations and licensing agencies continues,

Mr. Kammerer is to be applauded for his openness and refusal to shrink from acceptance of full responsibility for his actions and the seriousnes of his offenses. While some rationalization is convenient to come by in the interests of expediency and the reality of requirements to obtain contracts, nonetheless he knows and admits that his conduct was wrong, misguided and illegal.

Direct Answers

Mr. Kammerer responded openly and unflinchingly to some hard and incisive comments and questions from the au-

KOERNER AND WELSH CO-AUTHOR BOOK

Phila. Section Past President, Dr. Robert M. Koerner, Professor of Civil Engineering, Drexel University; and prominent Past Section Officer Joseph P. Welsh, Vice President, Marketing and Engineering, Hayward Baker Company, are the authors of the volume: Construction and Geotechnical Engineering Using Synthetic Fabric, recently published by John Wiley & Sons, Inc., New York City. Mr. Welsh's firm is based in Maryland, and specializes in ground modification methods.

The book is the first ever published on the use of fiber and fabrics as building construction materials since the birth and rapid expansion of the recently developed processes and techniques.

A few highlights of the contents include the following:

- Man-made fiber production; physical properties and statistics
- * Overview of construction fabric uses - reinforcement, drainage erosion control, forms
- * Separation of materials using fabrics in earth dams, railroad ballast/subgrade separation
- * Reinforcement using fabrics in road construction, slope stability problems, retaining walls, reinforced concrete, control of reflective cracking
- * Drainage pavement underdrain systems, earth dams
- * Forms using fabrics concrete, pile jacking, columns for mine and cavern stability
- * Guidelines for fabric use, current research and development
- * Details and characteristics of construction fabrics.

Authors to Conduct Courses

Authors Koerner and Welsh have been invited by National ASCE and other organizations to lecture and conduct short courses on Fabrics at Regional and National Conventions,

dience. His task has not been an easy one and he is facing his problems brave-

At the conclusion of Mr. Kammerer's talk, President Zitomer presented him the Section's Certificate of Appreciation and a complimentary copy of the Book: "History of Civil Engineering and Construction in the Delaware Valley," the Philadelphia Section's publication honoring the National ASCE Convention in the 1976 Bicentennial Year, hosted by the Philadelphia Section.

ASCE DUES BILLS AND TECHNICAL GROUP DETAILS

Section members will notice in the 1979 dues bill received recently from National ASCE Headquarters, that the PHILADELPHIA (SECTION) DUES is itemized as \$11.00. This amount includes a \$1.00 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:

Technical Group Liaison

Dr. Frederic Roll (Section Vice Pres.)
Civil & Urban Engineering Dept.
University of Pennsylvania
229 Towne Building - D3
Phila., PA 19104
(215) 243-8347

Construction Group Frederic Plotnick, Chairman 806 Hillton Lane

Elkins Park, PA 19117 (215) 782-1246

Geotechnical Group

Jimmy C. Alexander, Chairman 70 Palm Street Newark, N. J. 07106

Phone: c/o Site Engineers (215) 922-5024

Hydraulies & Sanitary Group Patrick R. Cairo, Chairman

> Phila. Water Dept., Room 1270 Municipal Services Bldg. Phila., PA 19107 (215) 686-3883

Structural Group

Dr. Ish Aneja, Chairman Westinghouse Electric Corp. Steam Turbines P. O. Box 9175 Phila., PA 19113

(215) 595-4230 Transportation & Urban Development Group

Willard Whitbred, Chairman

c/o George Beetle Consulting Engineers 1518 Walnut Street Phila., PA 19102 (215) 546-7442

Of course, don't forget to include in your check the \$10.00 Phila. Section dues, which is the other part of the \$11.00 appearing on the bill!

SPRING SOCIAL DATE CHANGE

Because of a conflict of reservations at Bala Golf Club, the date of the Phila. Section 1980 Annual Spring Social has been changed to SUNDAY, MAY 4, 1980 (the original date was Saturday, May 3rd). Please mark the change on your pink program card and on your appointment calendar.

BOARD ENDORSES D.R.B.C. STUDY REPORT

At the Phila, Section, ASCE Board of Directors meeting preceding the Section's December 11, 1979 Luncheon Meeting, an in-depth discussion was conducted on a special Ad Hoc Committee to Review the Delaware River Basin Commission (D.R.B.C.) Comprehensive (Level B) Water Study.

The Ad Hoc Committee is comprised of representatives of ASCE Local Sections appropriate to the area of the Study: Lehigh Valley Section, New Jersey Section, Philadelphia Section, and Reading Branch. The group represents more than 4,000 Civil Engineers in Eastern Pennsylvania and New Jersey. A Final Draft Report and Environmental Impact Statement was drawn up by the Committee in October, 1979, and copies have been presented to D.R.B.C., other public agencies and officials, legislators, the news media, and the public.

The Phila, Section Board of Directors, on behalf of the Membership, endorsed the Ad Hoc Committee Report, with several comments, suggested exceptions, modifications and additions recommended by Section affiliates and individuals.

Copies of the Report will be available to the Section Membership at the January 8, 1980 regular meeting at the Engineers' Club. Section members may obtain further information by contacting the Section representatives on the Ad Hoc Committee:

Will M. Heiser (Past President, Phila. Section ASCE)

> c/o Justin & Courtney, Inc. 1617 J. F. K. Boulevard Phila., PA 19103 (215) 564-4282

John E. Spitko, Jr. (Section Director) c/o Greeley & Hansen Six Penn Center Plaza Phila., PA 19103 (215) 563-3460

The Section Membership is also referred to the December 1979 issue of THE NEWS, which features a detailed writeup of the topic of the November 13, 1979 Section meeting: "The Delaware

HEISER ACTIVE ON C.O.E.C.

Section Past President Will M. Heiser has been busily engaged in the important work of National ASCE Committee on Employment Conditions (C.O.E.C.)

At the Section Board of Directors meeting on December 11, 1979, Mr. Heiser reported that the Committee highly commends the Philadelphia Section on the thoroughness of its Salary Benefits Surveys for the past three years. The 1979 Survey was published in the October, 1979 issue of THE NEWS. The preliminary study and survey was conducted and the final report was prepared by Section Director Norman J. Weintraub, acting as a Committee of One on the project. Mr. Weintraub's work drew special praise from the National C.O.E.C.

MR. WARD'S MESSAGE

Editor's Note: Following are some significant excerpts from the Inaugural Speech of ASCE President Joseph S. Ward at the ASCE Annual Convention and CExpo, Atlanta, Georgia, October 24, 1979. THE NEWS considers the points of Mr. Ward's remarks of concern and interest to all ASCE members.

If we are to believe the futurists and others concerned with long-range planning, the period from now until the 21st century will perhaps be the most critical twenty years in the history of mankind. The responsibilities incumbent on us as civil engineers - will be greater than ever before. The problems - the challenges - facing us are seemingly without number. Every public, every special interest group, every organization, every nation, has its own agenda its own list of problems that need solving. Depending on the outlook of the organization, these range in scope from the parochial to the universal. The American Society of Civil Engineers, precisely because it is at the forefront of our profession, must tackle challenges more universal than parochial, more worldwide than local.

One of the items on my personal agenda as President is an attempt to identify those problems we civil engineers would consider as most important in the coming decades: energy, the environment, and the future of ASCE.

* * * * *

(continued next month)

River Basin Comprehensive Study—Meeting Water Needs for the Future"—with principal speaker, Gerald M. Hansler, Executive Director, DRBC.