

PHILADELPHIA SECTION

AMERICAN SOCIETY OF CIVIL ENGINEERS

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OUR 67th YEAR

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NOVEMBER MEETING

Philadelphia Section, American Society of Civil Engineers

TUESDAY, NOVEMBER 13, 1979

Engineers' Club, 1317 Spruce Street, Philadelphia

Cocktails - 5:30 P.M.

Dinner — 6:30 P.M.

Meeting — 7:30 P.M.

SUBJECT:

"THE DELAWARE RIVER BASIN COMPREHENSIVE STUDY — MEETING WATER NEEDS FOR THE FUTURE"

SPEAKER:

GERALD M. HANSLER, Executive Director, The Delaware River Basin Commission

PROGRAM HOST:

PATRICK R. CAIRO, Chairman, Hydraulics and Sanitary Group

Water Resources planning in the Delaware River Basin is currently in a state of transition. Though the Delaware is generally perceived to be a water rich basin, the experiences of the drought of the mid sixty's and the recent decision not to build a major storage reservoir at Tocks Island have combined to demonstrate the need for a thorough re-evaluation of the DRBC Comprehensive Plan. This plan, called the Level B Plan, must be carefully formulated to satisfy the competing demands made by four states which rely on the Delaware for continued economic growth and the environmental goals of preserving many of the natural elements of the Delaware River.

Mr. Hansler has served as Executive Director of the Basin Commission since 1977. He has a long and distinguished career in the environmental field. Before his current position, Mr. Hansler served as Regional Administrator of the Environmental Protection Agency in New York. He received his B.S. in Civil Engineering (1955) and B.S. in Industrial Engineering (1956) at the University of Washington State.

A series of recommended plans from the Level B Study have recently been released to the public and Mr. Hansler has indicated that he will be able to discuss candidly the significance of these actions at our meeting. We look forward to a lively discussion following Mr. Hansler's presentation.

SPECIAL EVENT:

LIFE MEMBERSHIP AWARDS

SPECIAL FEATURE:

VILLANOVA UNIVERSITY NIGHT

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

STUDENTS — Plan to attend for Dinner (Half Price) or meeting after Dinner Mail Reservation Cards Immediately or call Mr. deKovacs at the Engineers' Club — 735-5234 Win a FREE DINNER!

TECHNICAL GROUP ACTIVITIES

Hydraulies and Sanitary

October 3rd Luncheon Meeting

Frederick DeSanti of N.J. Public Service Electric and Gas spoke on the topic of "Gas Recovery at the Cinnaminson Landfill." His discussion, supplemented with slides covered the project from the conceptual phase to the operational phase, including exploratory work, construction methods and problems, purification of recovered natural gas, initial operating data, and contractual arrangements with an industrial user.

Clyde S. Younkin, Vice Chairman, H & S Group, was Program Host.

November Meeting

Sponsoring Main Section Meeting on November 13, 1979.

December Meeting

Date: Wednesday, December 19, 1979

Luncheon 12 noon — Engineers' Club

Subject: Strengthening of a Concrete Gravity Dam

Speaker: David B. Campbell,

O'Brien and Gere Engineers

Program Host: Dana R. Pizarro,

Secretary-Treasurer, H & S Group

The dam to be described is a structure approximately 130 feet high with a crest length of 850 feet. Slides and discussion will cover the basis of design, stability criteria, post tensioning design and construction.

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Structural

Date: Wednesday, November 14, 1979 Luncheon 12 noon — Engineers' Club Meeting 12:45 p.m.

Subject: Structural Evaluation for Hy-(continued on page 2)

DISTRICT 4 COUNCIL REPORT

The Annual District 4 Council was held in Mechanicsburg on October 12-13 with delegates President Kenneth J. Zitomer, Vice President Joseph R. Syrnick and Secretary Albert M. Tantala representing the Philadelphia Section.

District 4 covers the entire state of Pennsylvania and consists of the Central Pennsylvania, Lehigh Valley, Pittsburgh and Philadelphia Sections.

The purpose of District 4 Council is to give an opportunity and forum for these local sections to provide input to the District Director for relay to the National Board of Directors.

The delegates were briefed on items to be addressed at the upcoming National Board Meeting in Atlanta and discussed recent legislation pertinent to the Civil Engineering profession. Considerable discussion took place relative to the proposal to create a Student Grade of ASCE membership.

Zone 1 Vice-President Cranston Rogers presented a report on current National Affairs including the U.S. Justice Department situation regarding the "supplanting provision" in the Code of Ethics.

Pennoni Slated for Director

At the conclusion of the opening session, former Philadelphia Section President C. R. Pennoni was chosen as Director-Elect of District 4, for a three year term beginning October 1980.

The Section congratulates Chuck on his selection and is confident that he will serve the District well.

Editor's Note: THE NEWS thanks Vice President Syrnick (who is also Associate Editor) for the above article.

WOMEN'S AUXILIARY

November Joint Meeting

The next Luncheon-Meeting of the Section's Auxiliary will be a combined one with the Women's Auxiliaries of the Philadelphia Chapters of A.S.M.E. and and P.S.P.E. - A.S.M.E. hosting - at the Drexel University Activities Center (the James Cresse Student Center), S.W. Corner 32nd and Chestnut Streets, Phila. on THURSDAY, November 15, 1979, 12:00 noon

Principal speaker will be Mrs. Gerry S. Mason, Humorist. Her amusing subject will be: "Meanwhile, Back at the Chubhouse . . . "

Phila, Section Auxiliary members are cordially invited to bring guests.

LADIES — JOIN THE SECTION'S AUXILIARY NOW! ENJOY ALL THE INTERESTING ACTIVITIES AND SUPPORT ITS PROGRAMS. FOR FULL INFORMATION, ATTEND THE

SECTION SENDS FIVE TO SUMMER INSTITUTE

The Philadelphia Section, with special cooperation and assistance from the Reading Branch, Gilbert Associates, and Western Electric Company of Reading, Pa. sent five (5) minority students to the 1979 ASCE Summer Institute for Minority Students which was held at Northeastern University in Boston, Massachusetts. The students, all from Philadelphia area high schools, were selected from approximately twenty-five applicants.

The three week seminar was intended to introduce minority students to engineering topics with the aim of kindling career interest. Students selected for this program were: Lydia Mable from John Bartram High School, Gina Cubbage from Overbrook High School, Charmayne Williams from University City High School, Rene Jimenez from Edison High School and Reginald Bailey from St. Joseph's Preparatory High School.

MORE on the STUDENT CHAPTER CONFERENCE

In the October, 1979 issue of THE NEWS, Editor Sid Robin inadvertently omitted a highlighted feature of the 1979 ASCE Student Chapter Conference hosted by Drexel University last April 20th. It was a unique and enlightening talk by Dr. Edward Doheny, Professor of Civil Engineering at Drexel, on the subject: "Geologic Hazards." In a slide commentary presentation articulately described several unusual - almost unbelievable - geologically caused foundation failures and near catastrophes in a variety of structures, from bridges and earth dams (including the Teton Dam) to residences in the United States and abroad.

The talk was so popular that Dr. Doheny has been invited to present it at future meetings of Civil Engineering Student and Professional groups.

The October article in THE NEWS also failed to credit Drexel Student Chapter President Ms. Margaret Yevics, who presided at the Conference and, with assistance of Chapter members and Faculty Advisor Dr. Robert Koerner accomplished an outstanding job in arranging and conducting the splendid Conference.

THE NEWS (and your humble Editor) express sincere applogies for the previous omissions.

NOVEMBER (AND SUBSEQUENT) MEETINGS. CALL MEMBERSHIP CHAIRMAN, MARIE (MRS. KEN-NETH J.) ZITOMER — 548-5324.

TECHNICAL GROUP ACTIVITIES

(continued from page 1)

drodynamic Loads - Mark 1 Containment Program

Speaker: Dr. J. Ucciferro, Manager, Structural Analysis Group, United Engineers & Constructors, Inc., Phila.

Program Host: Dr. Ish Aneja, Chairman Structural Group

PLEASE ATTEND MEETINGS

PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS OFFICERS 1979 - 1980

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SEND COPY TO:

Sidney Robin

64 Nancy Drive

Richboro, Pennsylvania 18954 Phone: (215) 322-7464

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OCTOBER MEETING

October 9, 1979 Engineers' Club

The 1979-1980 season of the Phila. Section ASCE opened with a Luncheon-Meeting. "The Development of Franklintown-Construction Update" was the topic and John F. Notemyer, Project Engineer, Turner Construction Co., was principal speaker. Kenneth J. Zitomer presided at his first meeting as Section President, and Frederic L. Plotnick, Chairman of the Construction Group, which arranged and sponsored the meeting, was our competent Program Host.

Temple University Day

The ASCE Student Chapter, faculty and alumni of the Civil Engineering and Construction Department of Temple University College of Engineering Technology were featured at the meeting. Dr. Robert J. Stone, a prominent Phila. Section member, Head of the Department at Temple, introduced students, staff and alumni in attendance, including Dr. John L. Rumpf, Vice President of Temple University (and the first Dean of the College of Engineering Technology), John De Fazio, President of the Student Chapter, and his officers and Chapter members.

Dr. Stone reviewed highlights of the School's current and new programs: construction education; liaison with building contractors; productivity and statistical evaluation; the growing importance of surveying and photogrammetric mapping; preparation for Registration and E.I.T. exams; major expansion of soils and construction materials testing lab facilities and equipment; geological analyses of foundations; and construction-handling accident risks (i.e., the dangers of burns and other injuries in placing fresh concrete).

The Temple University College of Engineering Technology deserves the highest plaudits of the Delaware Valley professional community for its rapid and extraordinary growth in the relatively short period of its existence. The Phila. Section extends its heartiest congratulations.

The Franklintown Complex A. Promising Future

The 50-acre \$500 million development adjacent to the heart of downtown Philadelphia, long in the planning stage - is finally budding into reality. When completed, the project will include 3,000 housing units, office buildings, two hotels, shopping malls, theaters, recreation areas and facilities, and religious and educational institutions.

Principal participating organizations

and stockholders include giant corporations who have owned property and operated plants in the area, builders, manufacturers, insurance companies, etc.

In a slide-illustrated presentation, Mr. Notemyer described the structures in which his Company and others are involved in various stages of completion. These include a major hotel and convention center, office building, apartment houses and a Lutheran Home. As an executive of one of the country's largest building firms, Mr. Notemyer knows of the great financing problems which so often obstruct "getting off the ground" in projects of the scope and magnitude of Franklintown. In addition, of course as Mr. Notemver vividly pointed out, there exist the tight schedules; weather problems; continuing labor difficulties; materials shortages, availability and delivery complications,

Construction Schedule

Mr. Notemyer said that the completion schedule for some of the major structures calls for April, 1980 for the Smith-Kline office building; and October, 1980 for the Hotel and Convention Center. An innovative construction feature used by the Turner Co. is the "flying form" system of concrete framing, in which a typical floor is formed and poured in three days.

Foundation Conditions

Mr. Notemyer illustrated the prominent soil and foundation conditions at the site. The Hotel and Convention Center, office building complex area required concrete caissons 3'-9" in diameter and approx. 50-feet deep.

Beautiful slides and architectural renderings of luxury features of all the buildings rounded out a fitting conclusion to an interesting presentation by our distinguished speaker.

President Zitomer presented Mr. Notemyer the Philadelphia Section's Certificate of Appreciation, and a copy of The Book: "History of Civil Engineering and Construction in the Delaware Valley," produced by the Section for the Bicentennial Year National ASCE Convention held in Philadelphia in the fall of 1976

NOVEMBER IS

PHILADELPHIA
SECTION MEMBERSHIP
RECRUITMENT MONTH

Bring an Eligible Member to our next Meeting

ROLL REPRESENTS U.S. AT SEMINAR

Phila. Section Vice President Dr. Frederic Roll, Professor, Dept. of Civil and Urban Engineering, University of Pennsylvania, was one of six selected United States representatives who participated - with six corresponding delegates from Europe in a seminar jointly sponsored by the American Concrete Institute (ACI) and its European counterpart: Comité Européen Du Beton (CEB). The seminar, workshop was on the subject of "Creep and Shrinkage in Concrete," and was held at the 75th Anniversary Convention of ACI in Washington, D.C. during the week of October 28 - November 2, 1979.

The objects of the seminar workshop discussions include:

General requirements for inclusion in building codes.

Presentation of relevant prediction methods of creep and shrinkage, and evaluation of these methods.

Consequences possible resulting from the utilization of these methods and evaluations

DREXEL SENIORS HONORED

National Headquarters, ASCE has awarded the 1979 Construction Engineering Scholarship to Drexel C.E. Senior Charles Dougherty for his paper: "Erection of the Route 77 Bridge Over New River, Va." Other awards were made at the Regional level to Senior C.E. Students: John Prybella, "Asphalt Pavements - Cracking - Rehabilitation Techniques;" Robert E. Hackman, "Laboratory Study of the Use of Synthetic Fabrics in Road Construction;" Daniel W. Gallagher, 'Life Support Systems -Environmental Systems in Space;" J. Scott Heisey, "Site Investigation and Foundation Considerations for Nuclear Power Plants,"

Editor's Note: The papers of Mr. Hackman and Mr. Gallagher are covered in the article on the 41st Student Chapter Conference elsewhere in the Oct., 1979 issue of THE NEWS.

DO YOU RECEIVE 'THE NEWS'?

Several Phila Section members apparently are not on the mailing list of THE NEWS. If you are one of these, please call President Zitomer's secretary, Ms. Jeanette Kohler, at 686-3898, and she will arrange with National Headquarters in New York to assure that your latest mailing address is added to the label list sent out by Headquarters to the Secretary of the Philadelphia Section.

CLUB FACILITIES AVAILABLE

The Engineers' Club House Committee cordially invites Phila. Section ASCE members to use the facilities of the Club on an individual cash basis during the Holiday Season 1979. The Club sponsors many special events during the months of November, December, and January, as follows:

- Thanksgiving Day Dinner, November 22, 1979, 12 noon until 5 p.m.
- Children's Christmas Party, December 14, 1979, Cartoons, Santa Claus and Sesame Street Characters
- New Year's Day Open House, January 1, 1980, 9 a.m. until 5 p.m. You will have an opportunity to watch the Mummer's Parade in Center City and use the Club facilities during the day.

For full information, call Executive Manager Jozsef L. de Kovaes at the Engineers' Club (215) 735-5234.

ASCE PUBLICATIONS AVAILABLE

ASCE has completed publication of Applied Techniques for Cold Environments, the Proceedings of the May 1978 Specialty Conference held in Anchorage, Alaska.

There is a growing, interdisciplinary interest in cold regions practice. The proceedings emphasizes the broad range of engineering problems and solutions in the cold regions of the world. The two volumes contain 73 papers, the keynote and luncheon addresses, state of the art reviews, panel discussions, and summary statements. The papers are divided into the following areas: Land, Coastal, and Resource Development; Materials, Manpower, Equipment, and Methods; and Commercial, Institutional and Industrial Facilities Support Systems. You may purchase this publication by sending an order and a check for \$40.00 to ASCE Publication Sales Department, 345 East 47th Street, New York, New York 10017.

The following ENERGY publications are available from ASCE to help you keep up with this dynamic subject area: Nuclear Facilities Siting, (6-79, No. 14615, \$1.50); Transportation & Energy, (5-79, \$5.00); Selected Areas of Aerospace Technical Applications to Civil Engineering, (5-79, No. 14563, \$1.50); Energy Division Journal, (aperiodically, \$4.00 subscription).

All prices are discounted for members. Send check or money order with your order (payable to ASCE) to ASCE Publications Sales Department as above.

N. Y. ACADEMY SPONSORS BRIDGE CONFERENCE

The New York Academy of Sciences will sponsor a Conference on Long-Span Bridge Structures: History and Performance on November 13-14, 1979 at The Roosevelt Hotel, Madison Ave. & 45th Street, New York, N.Y. 10017.

This conference will focus scientific attention on the topic of long-span bridges. A state-of-the-art updating will cover both suspension bridges and cable-stayed bridges. The performance of long-span bridge structures will be examined through specific cases; moreover, the problem areas of fatigue, brittle fracture, stress corrision, and wind forces will be discussed in technical detail. Some of the talks will have a historical character, and others will explore possibilities for future long-span bridges.

The Conference also marks a historical centennial: the one hundredth anniversary of the birth of the great Swiss American bridge designer, Othmar Hermann Ammann, who died in 1965. The conference honors Ammann's memory and follows his innovative and pioneering spirit in advancing the technology of long-span bridge design and construction. Participation will be international, and will draw primarily engineers, especially those in the civil and structural disciplines.

Co-chairman of the Conference will be **Blair Birdsall**, a Past President (1955-1956) and partner of Steinman, Boynton, Gronquist and Birdsall, Consulting Engineers, New York.

For further information, contact: Conference Department, The New York Academy of Sciences, 2 East 63rd Street, New York, N.Y. 10021.

NATIONAL COMMITTEE OPENING

There is an immediate vacancy on the ASCE National Committee on Student Services. This committee provides the National link between the Student Chapters and ASCE on the National level and complements the Local efforts of Contact and Associate Contact Members. Traditionally, each Zone provides two (2) representatives to the committee one from academia and one a general practitioner. The current opening is for the practitioner and involves attendance at approximately three (3) meetings a year with additional correspondence and report review responsibilities. Anyone interested in this position should contact Section Vice-President Joseph Syrnick at 686-5539.

. . . For more Information

When you have questions about any program or agency of the Federal Government, you may want to call the Federal Information Center (FIC) nearest you. The FIC Service helps consumers locate the right agency - usually Federal, but sometimes State or Local for help with problems.

In Philadelphia, the telephone number is (215) 597-7042.

RUSSIAN HYDROTECHNICAL CONSTRUCTION JOURNAL

National ASCE has sponsored since 1967 the translation and publication of a monthly journal of the Russian Government dealing with water-related construction, principally hydrogenerating complexes, navigation structure, and water-supply systems.

This very informative journal permits a close review of the progress which the Russians are making and the problems they face and are overcoming in the development of the vast water resources of their nation. The articles cover many fields including construction, operation, research and development, hydrogenerating equipment and associated machinery, the economics of multipurpose water development, pollution and contamination, and others.

The Russians must cope with many unusual problems of construction which are not experienced or of little importance to the rest of the world. These include severe winter climates, the use of loams and clays as well as sand and gravel in the construction of very large dams, the freezing of concrete, the passage of ice through diversion channels and post cofferdams.

Economics also plays a large roll, especially as it is related to costs of construction and operation of multipurpose complexes.

Water pollution and the severe disruption of commercial fishing by industries, municipalities, and the construction of hydroelectric complexes which act as barriers to fish movement to and from the spawning grounds, are considered.

This journal is widely read in the engineering field and it is of great value in engineering college libraries as a source of information to students

Subscription price is \$260.00 per year; \$170.00 to members, and \$208.00 for public and school libraries. Single issues are available at \$15.00 per issue. Write or telephone for information and details: ASCE, 345 E, 47th St., New York, NY 10017, (212) 644-7672.