TESTING FORUM

ASTM D-18 NEWS

Call for Papers

Papers are needed for the International Symposium on Laboratory and Field Vane Shear Strength Testing, sponsored by ASTM Committee D-18 on Soil and Rock. The symposium will be held the week of 18 Jan. 1987 at the Hyatt Regency Tampa, Tampa, FL, in conjunction with the standards development meetings of Committee D-18 to be held that week.

The goal of the symposium is to review the state of knowledge of the vane shear strength test, with emphasis on the testing of soft seabed soils. The symposium will provide the latest information on test theory, methods, and interpretation.

Contributed papers are solicited from all areas of laboratory and field vane testing, including: theory of laboratory and field vane testing, including the engineering significance of peak and residual strength; use of the field vane in different types of soil onshore and offshore, particularly to obtain data for foundation design; identification and use of different types of laboratory vane tests and the comparison of results with those obtained by using the field vane; comparison of field vane test results with those obtained using other in-situ test methods, particularly offshore; suitability of soils for vane testing and corrections applicable to field vane test results; and methods of soil remolding with regard to sensitivity calculations.

Prospective authors are requested to submit a title, a 300 to 500 word abstract, and an ASTM Paper Submittal Form by *1 June 1986* to Symposium Chairman Adrian F. Richards, Fugro B. V., P.O. Box 63, 2260 AB, Leidschendam, The Netherlands, 31/70/111286. Cochairing the symposium is Michael Perlow, Jr., Valley Foundation Consultants, Inc., 833 N. 13th Street, Allentown, PA 18102-1162, U.S.A., 215/435-1485.

ASTM Paper Submittal Forms are available from Kathy Greene, ASTM, 1916 Race Street, Philadelphia, PA 19103, 215/299-5414. Additional information is available from Richards, Perlow, or Greene.

Authors of papers selected for the symposium will be notified by *1 July 1986*. Final manuscripts are due *1 Nov. 1986*. The manuscripts will be reviewed and considered for publication in the anticipated ASTM Special Technical Publication (STP) based on the symposium.

ASTM may print and distribute accepted abstracts at the symposium with the approval of the symposium chairmen.

Papers are also needed for the following two conferences sponsored by the Institution of Civil Engineers, London, England:

- *Conference on Foundations, Tunnels, and Sewers*—86: Send Abstracts by 30 June 1986 to Dr. M. C. Forde, Department of Civil Engineering, University of Edinburgh, The Kings Buildings, Mayfield Rd., Edinburgh EH10 6BB, Scotland.
- *3rd International Conference on Structural Faults and Repair*—87: Send Abstracts by 31 Aug. 1986 to Dr. M. C. Forde, Department of Civil Engineering, University of Edinburgh, The Kings Buildings, Mayfield Rd., Edinburgh EH9 3JL, Scotland.

New Standards

Subcommittee D18.15 on Stabilization with Admixtures, a branch of Committee D-18 on Soil and Rock, is working on a number of new standards. The topics include optimum lime content by the pH method, compressive strength of soil-lime mixtures, and resilient modulus of stabilized soils. Contact: Mehmet C. Anday, Virginia Highway Research Council, P.O. Box 3817, University Station, Charlottesville, VA 22903 (804/293-1965); or Robert Morgan, ASTM (215/299-5505) for further information.

Report on the International Symposium on Karst Water Resources

The International Association of Hydrological Sciences (IAHS) and the International Association of Hydrogeologists (IAH) joined with Hacettepe University of Ankara, Turkey, in sponsoring the International Symposium on Karst Water Resources during 7-18 July 1985. Cosponsoring organizations included the Karst Water Resources Research Center Project of Hacettepe University and the United Nations Development Program through United Nations Department of Technical Cooperation for Development and the following government organizations of Turkey—Ministry of Energy and Natural Resources, the State Hydraulic Works (DSI), General Directorate of Mineral Research and Exploration (MTA), Electrical Power Resources Survey and Development Administration (EIE) and Geological Engineering Department of the Engineering Faculty and Karst Hydrogeology Research Group (KRG) of Hacettepe University Earth Sciences Application and Research Center. Cooperating organizations included the Turkish National Committee of the International Hydrological Program; United Nations Educational, Scientific and Cultural Organization (Unesco); and the International Water Resources Association (IWRA). The papers sessions were held at the new Turkish National Library in Ankara during 7-12 July 1985 and a field trip from Ankara through Konya and Antalya to Izmir took place during 13-18 July. The symposium Chairman was Professor Gultekin Gunay, Head of the Hydrogeological Engineering Department of Ankara's Hacettepe University and Cochairman was A. Ivan Johnson (Chairman of ASTM Subcommittee D18.93 on Nomenclature for Soil Mechanics Functioning as ASTM Section of Joint Committee on Nomenclature for Soil Mechanics and Foundations), Water Resources Consultant from Denver, CO. Twenty-seven countries were in the attendance of around 200 scientists.

Formal presentations, informal discussions, and observations in the field emphasized hydrogeologic controls on the development and management of water resources in karst regions. During the first week papers were presented orally and by poster sessions on regional aspects of karst in various countries including hydrology

and water resources development, engineering geology, karst landforms and hydrogeology. In mid-week a one-day field trip gave participants the opportunity to visit campuses and laboratories of Hacettepe and Middle East Technical Universities.

About one-third of Turkey is underlain by carbonate rocks. Three of the most important regions—Central Anatolia, the Taurus Mountains (Taurids), and the travertine terraces of Antalya—were studied during the six-day optional field trip from Ankara to Antalya and Izmir.

Extensive hydrogeologic investigation of the calcareous drainage basins are being conducted by DSI and Hacettepe University in the Antalya region as a basis for appraisal of water demand and supply, management of reservoirs and evaluation of proposed dam sites. An example of the accomplishment of Turkish scientists and engineers is provided by construction and operation of the recently completed Omapinar Dam in the karst east of Antalya. This large dam, cresting 185 m above its foundation, is a major regional source of hydroelectric power and provides the energy required for aluminum processing at Seydisher 0.80 km to the north of the dam. Information and discussions were provided by field trip leaders concerning environmental problems and water management practices of those many major civilizations that have inhabited the Turkish region since before the first millenium B.C.

Abstracts of the presented papers and the field trip guide book can be obtained for $5.00 each by contacting Professor Dr. Gultekin Gunay, Hydrogeological Engineering Department, Hacettepe University, Beytepe, Ankara, Turkey. Symposium papers will be available in a proceedings, to be published as an IAHS numbered volume to be available in early 1986. Further information can be obtained from A. Ivan Johnson, Water Resources Consultant, 7474 Upham Court, Arvada, CO 80003.

William Back
U.S. Geological Survey
Reston, VA

Subcommittee Spotlight

This section is provided for information requests, announcement of new activities, sections, task groups, or other items of interest.

D18.15

Precision and bias statements are receiving much attention within ASTM. The chairman of ASTM Subcommittee D18.15.01 on Stabilization of Portland Cement has made the following request for information to aid in their preparation: Any soil-cement test data that might be helpful in preparing precision and bias statements (precision, accuracy, replicate test results, and so forth) is requested for the following standard test methods:

- ASTM D 558, Standard Test Methods for Moisture-Density Relations of Soil-Cement Mixtures
- ASTM D 559, Standard Methods for Wetting-and-Drying Tests of Compacted Soil-Cement Mixtures
- ASTM D 560, Standard Methods for Freezing-and-Thawing Tests of Compacted Soil-Cement Mixtures
- ASTM D 806, Standard Test Method for Cement Content of Soil-Cement Mixtures
- ASTM D 1633, Standard Test Method for Compressive Strength of Molded Soil-Cement Cylinders
- ASTM D 1634, Standard Test Method for Compressive Strength of Soil-Cement Using Portions of Beams Broken in Flexure (Modified Cube Method)
- ASTM D 1635, Standard Test Method for Flexural Strength of Soil-Cement Using Simple Beam with Third-Point Loading
- ASTM D 2901, Standard Test Method for Cement Content of Freshly Mixed Soil-Cement

Please contact Robert G. Packard, Chairman of Subcommittee D18.15.01 at the Portland Cement Association, 5420 Old Orchard Road, Skokie, IL 60077-4321, Telephone (312) 966-6200.

Future Meetings

15-19 June 1986
Louisville, KY
D18.05/D18.09 Symposium on Advanced Triaxial Testing.

18-21 Jan. 1987
Tampa, FL
D18.13 Symposium on In-Situ Vane Shear Applications in the Marine Environment.

21-26 June 1987
Cincinnati, OH
D-18 on Soil and Rock and
D-35 on Geotextiles and Related Products

January Meeting 1988
Albuquerque, NM
D-18 on Soil and Rock

22-27 Jan. 1989
Orlando, FL
D-18 on Soil and Rock

Committee D-18 Officer Changes

New D-18 Chairman Woody Shockley and the five vice-chairmen for 1986 through 87 (Fig. 1) have already begun providing leadership and encouragement to those in their areas of responsibility.

TESTING FORUM

FIG. 1—*D-18 Chairman and vice-chairmen (from left to right): R. E. Gray, H. J. Pincus, W. G. Shockley (chairman), R. C. Deen, P. M. Jarrett, and R. S. Ladd.*

FIG. 2—*W. G. Shockley (left) presents the 1985 Hogentogler Award to A. O. Landva (right); coauthor P. La Rochelle was unable to attend.*

Chairman Shockley announced the following changes in subcommittee chairmen and one change on the Executive Subcommittee:

D18.04, Groundwater Movement and Hydrologic Properties
David E. Daniel, vice Richard S. Ladd.
D18.12, Rock Mechanics
Bill Austen, vice Charles J. Haas
D18.18, Peats and Organic Soils
Bill Lovell, vice Peter M. Jarrett
D18.91, Editorial
Gary Durham, vice Robert C. Deen
D18.96, Research and Standards Development
Adrian Pelzner, vice W. G. Shockley
D18.90, Executive Subcommittee
Vincent Drnevich, Member at Large, to fill the term of Marshall Silver, resigned.

Awards

The 1985 Hogentogler Award was presented at Committee D-18's recent meeting in Cocoa Beach, FL, to A. O. Landva and P. La Rochelle for their paper, "Compressibility and Shear Characteristics of Radforth Peats," published in Testing of Peats and Organic Soils (STP 820).

The 1986 recipients of the Hogentogler Award are William Cox, David Dixon, and Benton Murphy for their paper, "Lateral-Load Tests on 25.4-mm (1-in.) Diameter Piles in Very Soft Clay in Side-by-Side and In-Line Groups," published in Laterally Loaded Deep Foundations: Analysis and Performance (STP 835).

FIG. 3—*Chairman Shockley (left) presented an Award of Appreciation plaque to Mr. Adrian Pelzner (right) in recognition of his services as D-18 Committee Chairman the past four years at D-18's June 1985 Meeting.*

TESTING FORUM

New UNESCO/IHP Publication on Land Subsidence Due to Ground-Water Withdrawal

As a part of a project of the International Hydrological Program, the United Nations Educational, Scientific, and Cultural Organization (Unesco) has released the new publication, *Guidebook to Studies of Land Subsidence Due to Ground-Water Withdrawal.* Paying particular attention to measures to control and arrest subsidence, the publication should serve as a guide to engineers, geologists, and hydrologists faced with investigation and solving of problems of land subsidence.

The publication was prepared by a Unesco Working Group consisting of the following international experts on land subsidence: Joseph F. Poland (Chairman), U.S. Geological Survey, Sacramento, CA; Laura Carbognin, National Research Council (CNR), Venice, Italy; A. Ivan Johnson, Woodward-Clyde Consultants, Denver, CO; German Figuero Vega, Comision de Aguas de Valle de Mexico, Mexico D.F., Mexico, and Soki Yamamoto, Rissho University, Tokyo, Japan. The guidebook is organized into two major parts. Part I is a manual of seven chapters related to the occurrence, measurement, mechanics, characteristics, prediction, and control of land subsidence and to the economic, social, and legal impacts of subsidence. Part II consists of a discussion of various types of land subsidence followed by 15 case histories of the world and covering a range of conditions and magnitudes of subsidence. An extensive list of references is available for each major subdivision of the publication for those readers who wish to learn more about subsidence.

The 327-page guidebook is available as "Unesco Studies and Reports in Hydrology No. 40," from Unesco, 7 Place de Fontenoy, 75700 Paris, France. The cost is 85FF (approximately $9.00).

ASTM Committee D-18 on Soil and Rock

Scope

The promotion of knowledge; stimulation of research; the development of specifications and methods for sampling and testing; and the development of nomenclature, definitions, and practices relating to the properties and behavior of soil, rock, and the fluids contained therein. Excluded are the uses of rock for building stone and for constituent materials in portland cement and bituminous paving and structures coming under the jurisdiction of other committees. Included are the properties and behavior of: (1) soil-like materials such as peats and related organic materials, (2) geotextiles, and (3) fluids occupying the pore spaces, fissures, and other voids in soil and rock insofar as such fluids may influence the properties, behavior, and uses of the soil and rock materials.

Officers

Chairman: W. G. Shockley, 326 Lake Hill Dr., Vicksburg, MS 39180.

First Vice-Chairman: R. E. Gray, GAI Consultants, 570 Beatty Rd., Monroevill, PA 15146.

Vice-Chairman: Robert C. Deen, University of Kentucky, Kentucky Transportation Research Program, Transportation Research Bldg., Lexington, KY 40506.

Vice-Chairman: P. M. Jarrett, Royal Military College, Department of Engineering, Kingston, Ontario, Canada K7L 2W3.

Vice-Chairman: H. J. Pincus, University of Wisconsin—Milwaukee, Department of Geological Sciences, Sabin Hall, Milwaukee, WI 53201.

Vice-Chairman: R. S. Ladd, Woodward-Clyde Consultants, 1425 Broad St., Clifton, NJ 07012.

Secretary: R. J. Stephenson, U.S. Army Corps of Engineers, South Atlantic Division Lab., 611 S. Cobb Dr., Marietta, GA 30060.

Membership Secretary: H. F. Hanson, Los Angles City, Department of Water and Power, P.O. Box 111, (510 E. Second St.), Los Angeles, CA 90051.

Subcommittees and Their Chairmen

TECHNICAL

D18.01 Surface and Subsurface Reconnaissance
C. B. Petterson

D 18.02 Sampling and Related Field Testing for Soil Investigations
R. E. Brown

D18.03 Texture, Plasticity, and Density Characteristics of Soils
R. C. Horz

D18.04 Hydrologic Properties of Soil and Rock
R. S. Ladd

D18.05 Structural Properties of Soils
R. T. Donaghe

D18.06 Physico-Chemical Properties of Soils and Rocks
G. R. Olhoeft

D18.07 Identification and Classification of Soils
C. H. McElroy

D18.08 Special and Construction Control Tests
J. R. Talbot

D18.09 Dynamic Properties of Soils
M. L. Silver

D18.10 Bearing Tests of Soils in Place
G. Y. Baladi

D18.11 Deep Foundations
E. T. Mosley

D18.12 Rock Mechanics
William Austin

D18.13 Marine Geotechnics
R. C. Chaney

D18.14 Geotechnics of Waste Management
D. E. Clark

D18.15 Stabilization by Additives
M. C. Anday

D18.16 Chemical Grouting
R. H. Karol

D18.17 Rock for Erosion Control
C. Merrick

D18.18 Peats and Organic Soils
P. M. Jarrett

D18.20 Impermeable Barriers
A. I. Johnson

ADMINISTRATIVE

D18.91 Editorial
G. N. Durham

D18.92 Papers
V. P. Drnevich

D18.93 Nomenclature for Soil and Rock Mechanics
A. I. Johnson

D18.94 Education and Training
N. O. Schmidt

D18.95 Information Retrieval and Data Automation
Carl D. Tockstein

D18.96 Research Steering and Standards Development
Adrian Pelzner

D18.97 Special Awards
R. G. Packard

D18.98 Hogentogler Award
R. E. Gray

D18.99 Quality Control
J. R. Forbes