

TESTING FORUM

Committee D-18 News

Symposium and Standards Activity Within the Subcommittees

The following report is a summary of the symposium and standards activities within the subcommittees of Committee D-18 on Soil and Rock that took place at the meeting in Toronto, Canada, 21-26 June 1982. Contact main Committee Chairman Adrian Pelzner or Subcommittee chairman as listed below for further details.

D18.10 Bearing Capacity of Soils

CHAIRMAN: GILBERT BALADI

- This subcommittee sponsored a mini symposium on nondestructive testing of pavements that was well attended. Nine papers were presented that dealt with the various approaches to pavement ratings both static and dynamic. This was followed by an inspection and demonstration of both dynaflect and falling weight deflectionometer equipment.

- At the regular subcommittee meeting, Chairman Baladi appointed Bill Lovell of Purdue University as Secretary. Chairman Baladi suggested that the subcommittee should be renamed and have a new scope. The revised scope would retain the responsibility for traditional static type tests and would add the newer dynamic ones. Chairman Baladi and Mike Womak of the U.S. Air Force are drafting the needed changes.

- Four new sections are to be formed within the subcommittee:

- 01 Static Tests,
- 02 Dynamic (Cyclic) Tests,
- 03 Dynamic (Impact) Tests, and
- 04 Deflection Profiling.

- Persons interested in participating in this new and vitally important area of standards development are requested to contact Dr. Gilbert Baladi, Department of Civil Engineering, Michigan State University, East Lansing, MI 48824.

D18.14 Geotechnics of Waste Management

ACTING CHAIRMAN: DON CLARK

- D18.14.81.02 Subcommittee balloted on "Proposed Standard for Determination of Pore Size Distribution by Mercury Intrusion Porosimetry." There were no negative votes, but it apparently barely failed to achieve a 60% affirmative vote. Some details of the voting are being reexamined to see if perhaps it did indeed pass.

- D18.14.81.03 "Method for Determining Soil Loss by Sheet and Rill Erosion" will be ready for subcommittee ballot at the December meeting.

- D18.14.81.01 "Test Method for Distribution Ratios by the Short Term Batch Method" has reached a third draft level. Response to the standard has generally been good. It will be subcommittee balloted in the near future.

- D18.14.81.04 "Test Method for the Laboratory Determination

of Dispersivity Coefficients" is not yet ready for subcommittee ballot. Further discussion and subcommittee ballot are planned for the December meeting.

- D18.14.82.01 "Test Method for Retardation Factor for Selected Chemical Species in Porous Media" draft is to be planned by December meeting.

D18.18 Peats and Related Materials

CHAIRMAN: PETER JARRETT

- Subcommittee D18.18 sponsored a highly successful symposium on the *Testing of Peats and Organic Soils*. This well attended day-long activity was divided into four sessions: Classification, Geotechnical Testing, Peat Inventory Evaluation, and Fuel Peat Characterization.

- W. R. Wiesner of BBT Geotechnical Consultants, Edmonton, Alberta, chaired the morning activities, while Stuart Richardson of Ecology and Environment, Inc., Arlington, VA had this responsibility in the afternoon. Fifteen papers were presented and these are scheduled for publication in a forthcoming STP. Chairman Jarrett made both an opening and closing statement.

Standards for Description of Frozen Soils

Soil and foundation engineers working where frozen soils are encountered, such as northern United States, Canada, and northern Europe, now have a voluntary consensus soil identification standard to follow.

Representatives in the field established standard D 4083 on the "Practice for Description of Frozen Soils (Visual-Manual Procedure)" under the jurisdiction of ASTM Committee D-18 through its Subcommittee D18.07 on Identification and Classification of Soil. Although there are identification systems already developed by the National Research Council of Canada and the U.S. Army Corps of Engineers Cold Regions Laboratory, the U.S. Office of Management and Budget is encouraging government to use standards developed on a voluntary consensus basis such as D 4083.

The new standard is intended primarily for use by soils engineers and technicians in the field, where the soil profile or samples from it may be observed in a relatively undisturbed frozen state. It may also be used in the laboratory to describe the condition of relatively undisturbed soil samples that have been maintained in a frozen condition following their acquisition in the field.

The standard complements two other ASTM documents on the description and classification of soils: D 2487 on the "Classification of Soils for Engineering Purposes," and D 2488 on the "Practice for the Description of Soils (Visual-Manual Procedure)." Further attention to standards for frozen soils, specifically their testing, will be considered by the subcommittee after a manual of frozen soil tests is completed by a task group of the National Research Council of Canada.

For more information on the new standard, contact Woodland Shockley, 326 Lake Hill Drive, Vicksburg, MS 39180, 601/636-9438.

TESTING FORUM

Award

Ivan Johnson, a consulting engineer from Denver, CO, was named a 1982 recipient of the Award of Merit by ASTM. The award recognizes distinguished service to the cause of voluntary standardization through productive service to ASTM, marked leadership, outstanding contribution, or publication of papers. Johnson was honored on 22 June 1982 during ceremonies hosted by ASTM Committee D-18 in Toronto. Johnson was cited for his outstanding leadership in the development of voluntary consensus standards for the field and the promotion of their use through service on many national and international organizations.

Pile Load Testing Film Now Available for General Distribution

The Deep Foundations Institute (DFI) dramatic film presentation, "Comprehensive Pile Load Testing Program—McDuffie Island, Mobile, Alabama," is now available for distribution, according to DFI President William F. Loftus.

The 16-mm color sound film explores the various components involved in the load testing of land and water piles to be used in a large coal-handling facility on McDuffie Island.

Loftus said, "The cross section of various types of piles currently on the market, including steel, timber, precast concrete, shell, and pipe, are all graphically illustrated in this film. "The film also provides insight into the methods used in mobilizing a major testing program."

The film has been called "highly informative" by educators and may be used by schools, colleges, engineering firms, and others interested in learning pile testing procedures. It has been enthusiastically received at major universities throughout the United States and Canada since its debut in November 1981.

Copies of the film are available for rental by contacting DFI Executive Director Fern McNerney at DFI headquarters, 66 Morris Avenue, Springfield, NJ 07081, U.S.A., or calling (201) 379-1100, Ext. 211. The rental cost is \$50.00 for DFI members, \$100.00 for non-members, \$100.00 for governmental agencies, and \$75.00 for non-profit educational institutions. The film is only available for purchase by DFI Corporate members at a cost of \$750.00 for the first print, with a 10% discount for purchase of the second print.

The Deep Foundations Institute represents contractors, engineers, owners, material suppliers, equipment manufacturers, and others concerned with the planning, design, and construction of deep foundations and protection of deep excavations throughout the world. Members encourage and participate in the practical application of research related to deep foundations and deep excavations.

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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: Adrian Pelzner, U.S. Agricultural Forest Service, Engineering Div., P.O. Box 2417, Washington, DC 20013.

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

Second Vice-Chairman: R. E. Gray, William Penn Estates, R. D. No. 4, 8 Black Walnut Dr., Greensburg, PA 15607.

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

Secretary: D. A. Tiedemann, U.S. Interior Water and Power, Resources Service D1543, DFC Box 25007, Denver, CO 80225.

Membership Secretary: R. J. Stephenson, U.S. Army Corps of Engineers Div. Lab., P.O. Box 51, Marietta, GA 30060.

Subcommittees and Their Chairmen

TECHNICAL

D18.01 Surface and Subsurface Reconnaissance

C. P. Fisher, Jr.

D 18.02 Sampling and Related Field Testing for Soil Investigations

H. E. Davis

D18.03 Texture, Plasticity, and Density Characteristics of Soils

R. S. Ladd

D18.04 Hydrologic Properties of Soil and Rock

C. O. Riggs

D18.05 Structural Properties of Soils

S. K. Saxena

D18.06 Physico-Chemical Properties of Soils and Rocks

G. R. Olhoft

D18.07 Identification and Classification of Soils

C. W. Britzius

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

D18.11 Deep Foundations

F. M. Fuller

D18.12 Rock Mechanics

H. J. Pincus

D18.13 Marine Geotechnics

R. C. Chaney

D18.14 Geotechnics of Waste Management

T. F. Zimmie

D18.15 Stabilization by Additives

M. C. Anday

D18.16 Chemical Grouting

R. H. Karol

D18.17 Rock for Erosion Control

K. L. Saucier

D18.18 Peats and Organic Soils

P. M. Jarrett

D18.19 Geotextiles and Their Applications

G. Raumann

D18.20 Impermeable Barriers

A. I. Johnson

ADMINISTRATIVE

D18.91 Editorial

R. C. Deen

D18.92 Papers

E. T. Selig

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

W. G. Shockley

D18.97 Special Awards

C. B. Crawford

D18.98 Hogentogler Award

R. E. Gray

D18.99 Quality Control

L. P. Kaufman