Editorial Introduction to Series by Professor Moore

At the encouragement of the Editorial Board, a series of articles has been prepared for the *Geotechnical Testing Journal* on modern electronics for geotechnical engineers. The purpose of the series is to help readers understand and use integrated circuit electronic components. The first two parts of the series are published in this issue. We propose seven additional parts in this series to be published in future issues if the readers think that these articles are helpful. The scope of future parts includes voltage comparators, waveform generators, digital devices, process-controlled devices, data acquisition devices, and microprocessors.

The author, Charles A. Moore, is a professor of civil engineering at Ohio State University in Columbus, Ohio. He has developed a course in principles of instrumentation for civil engineering graduate students. In addition, Dr. Moore has served as consultant on design of instrumentation and process control installations for laboratories and field projects.

Sources of Components

Electronic components are available from a variety of sources. Commonly used integrated circuit chips are available through mail order distributors, some of whom accept WATS line orders on national credit cards. These distributors advertise in popular magazines such as *Popular Electronics*. Nationally franchised electronics stores such as Lafayette Radio and Radio Shack stock frequently used components. Finally, authorized manufacturers' distributors can be found in the Yellow Pages. Before ordering from these firms, be sure to have them check their current stock. Back-ordered items rarely get delivered.

Sources of Information

Additional information on integrated circuits can be obtained from a variety of sources. Manufacturers of components publish data books describing their products in detail. They also publish application notes showing practical circuit configurations. Separate data books are usually printed for each class of device. The most important would be linear (for analog devices), and transistor-transistor logic (TTL) and complementary metal oxide semiconductor (CMOS) (for digital devices). Major distributors include:

National Semiconductor
2900 Semiconductor Dr.
Santa Clara, Calif. 95051

Intel Corporation
3065 Bowers Ave.
Santa Clara, Calif. 95051

RCA Solid State
Box 3200
Sommerville, N.J. 08876

Motorola Semiconductor
Box 20912
Phoenix, Ariz. 85036

Texas Instruments
Box 5012
Dallas, Tex. 75222

Fairchild Semiconductor
464 Ellis St.
Mountain View, Calif. 94042

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