

systems in eastern Texas, Louisiana and Arkansas. Prior to his present appointment Rice had been a sales manager with Fujinon. Earlier he had been a sales manager for Angonieux.

Charles T. Duncan, Dean of Howard University Law School, was elected a director of Eastman Kodak Co. He had served as principal Assistant U.S. Attorney for the District of Columbia, first General Counsel of the Equal Employment Opportunity Commission and Corporation Counsel for the District of Columbia before his appointment in 1974 as Dean of the Law School. He is director of the National Bank of Washington, a director of the NAACP Legal Defense and Education Fund, and a director of the Public Defender Service of the District of Columbia. He has received numerous citations for his contributions to public service.

John J. Burlinson has been named Vice-President and General Manager of Eprad, Inc., 123 West Woodruff, Toledo, OH 43620, it was announced by Al Boudouris, President. Burlinson most recently served as General Operations Manager of National Theatre Supply. He was also in charge of the NTS Simplex Manufacturing Operation from 1972 through 1975.

Jack Berner has retired from the post of General Manager for Rank Film Laboratories, Denham, Uxbridge, Middlesex UB9 5HQ, England, according to a recent announcement. He joined the Laboratories in 1937 and for 20 years he was solely responsible for all overnight processing. Later he managed Top Rank and North Acton Laboratories prior to becoming Assistant General Manager, and, in 1967, Technical General Manager of the company. He was appointed to the Board in 1969. He is succeeded by Roy Login who was recently promoted to the Board as Director of Operations.

Gary L. Kuntz has joined the Electronics Division of Cohu, Inc., Box 623, San Diego, CA 92112, as Sales Engineer. He was formerly with Telemation, Inc., as National Sales Manager for Government Accounts.

Books, Booklets, Brochures

Impact of Wideband Communications, a 223-page report, predicting that, within the next few years, communication satellites and fiber optics technologies will be combined to provide universally available, inexpensive wideband communications, is available from the publishers, International Resource Development Inc., 125 Elm St., New Canaan, CT 06840, at a price of \$795. A detailed description and the Table of Contents are sent free upon request. New communications channels would have a major effect on the economics of teleconferencing, electronic mail and data communications, the report states, predicting that this would be reflected in some substitution of teleconferencing for airline travel and some changes in the way in which business paper is used for business correspondence and forms. International Resource Development Inc. is a specialized research and management consulting firm which has produced more than 30 major market studies during the last six years.

The Standards Handbook for Metric Machinery Fasteners, is a 47-page handbook comparing ISO, American, British and German Metric standards to help designers select metric fasteners for machinery and equipment. Dimen-

sions, thread tolerances, and strength grade data are listed in quick-reference form. Differences between standards are noted and their significance explained. Preferred sizes and correct designations are given and standards numbers and their sources are listed. The book is available from The Standards Handbook Co., P.O. Box 114, Flint, MI 48501, at a price of \$6 in the United States, Canada and Mexico and \$7 elsewhere.

Crystal Testing Using a Spectrum Analyzer and Tracking Generator is an Application Note available upon request from Marconi Instruments, 100 Stonehurst Court, Northvale, NJ 07647. The Note discusses the characterization of quartz crystals for use in filters or oscillators using a conventional spectrum analyzer and tracking generator. The TF2370 Spectrum Analyzer is described in terms of its tracking generator facility together with its information storage and display system which make it useful for crystal testing and measurements. The Application Note discusses these tests with particular reference to transmission measurement methods of crystal characterization.

Video Products Guide, an 80-page illustrated catalog, available from Roscor Corp., 6160 West Oakton St., Morton Grove, IL 60053, lists and describes leading brands of video recorders, color and black-and-white cameras, monitors, special effects generators, terminal equipment and projection television systems. Specifications of most products are included. Among the items included are products of such well known manufacturers as Advent, Ampex, Arvin Echo, Hitachi, Ikegami, JVC, Panasonic, Sony, 3M, and other leading manufacturers. In addition to product descriptions, the *Video Products Guide* provides information on Roscor's service in systems engineering, video cassette duplication, production, post-production and equipment rental.

Antennas and Butterworth and Chebyshev Filters are two new books designed to provide owners of Hewlett-Packard HP-67 and HP-97 programmable personal calculators with solutions to problems in microwave, radio and television communications. The books priced at \$10 each, are available from Hewlett-Packard, 1501 Page Mill Rd., Palo Alto, CA 94304. The HP-97 is a fully programmable calculator that features a quiet printer, fully merged program memory and a "smart" magnetic card reader. The HP-67 is a pocket-size version of the HP-97.

Proper handling and storage to ensure longer magnetic tape life and greater reliability is discussed in a 4-page brochure available from 3M Company, Dept. Ma7-47, Box 33600, St. Paul, MN 55133. The publication, one in 3M's *Relativity* series, contains illustrated descriptions of common physical conditions which shorten tape life or cause poor performance, with explanations of ways to prevent them. Headings include The Recording Area; Tape Storage Area; Accidental Erasure; Cinching, Scratching and Edge Damage; Long-Term Storage; and others.

Objective TV Measurements, a booklet explaining the various television measurement parameters and the use of Insertion Test signals (ITS) to measure them, is available upon request from Marconi Instruments Ltd., Publicity Dept., Longacres, St. Albans, Herts AL4 0JN, England. The illustrated booklet describes the

range of MI instruments available to meet national and international ITS requirements and the ways in which systems can be tailored to meet individual requirements.

The NAC 35mm flicker-free analysis projector is described in a 4-page illustrated spec/data sheet available from Instrumentation Marketing Corp., 820 S. Mariposa St., Burbank, CA 91506. The projector, Model DF-35, is designed for rear screen, front screen or wall projection.

The TVS/TAS-1000 video/audio distribution switching system is described in an 8-page brochure available upon request from TeleMation, Inc., P.O. Box 15068, Salt Lake City, UT 84115. The illustrated brochure outlines the system's features including solid state crosspoints with vertical switching, single-coax "party-line" control, plug-in conversion to phone line or computer control and others. Design considerations are also covered.

The MQS-100 Synchronizer is described in a 12-page brochure available upon request from EECO Broadcast Products, 1441 East Chestnut Ave., Santa Ana, CA 91701. Specifications, features, controls, operation and applications are covered in the brochure. The system is designed to cue and synchronize any three mag tape transports, including video, audio and mag film, simultaneously.

How to use a spectrum analyzer for modulation measurements is explained in an Instrument Application Note available upon request from Marconi Instruments, 100 Stonehurst Court, Northvale, NJ 07647. The analyzer can be used to measure either amplitude modulated or frequency modulated signals.

The Vu-Graph II® overhead projector is described in a 4-page color brochure available from Charles Beseler Co., 8 Fernwood Rd., Florham Park, NJ 07932. The brochure details the projector's advanced optical features, extended lamp life and energy-saving characteristics. Other features described include single-knob control optical tuning which focuses the lighting system while simultaneously focusing the lens.

A new shorting plug designed to eliminate hum and noise pickup by unterminated microphone circuits is described in an illustrated sheet (Product Bulletin No. 323) available from Switchcraft, Inc., Sales Dept., 5555 North Elston Ave., Chicago, IL 60630. The shorting plugs connect directly into Switchcraft Q-G and QGP (Quick Ground Professional) female receptacles and similar types with compatible contact configurations. A shorting jumper connected between pins 2 and 3 on the plug shorts out unterminated microphone inputs thereby minimizing hum and noise pickup.

Applications of the 110 MHz spectrum analyzer, TF2370, are described in Applications Note, No. 18, available upon request from Marconi Instruments, 100 Stonehurst Court, Northvale, NJ 07647. Designed for spectral analysis, the instrument's secondary features simplify its operation and enhance its usefulness. The booklet explains how the secondary features can, on occasion, provide measurement techniques which dominate its primary use as an analyzer of spectra.