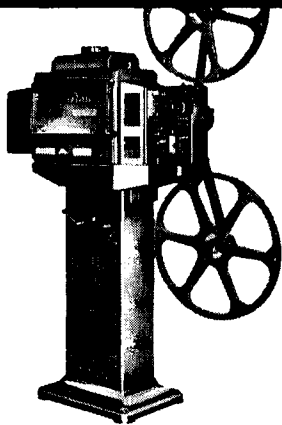


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he was awarded a doctorate in physics in 1926. That same year he rejoined AT&T in the Department of Development and Research.

Dr. Mertz moved to Bell Telephone Laboratories in 1934 and retired from the Laboratories in 1958. Since that time, he has been wholly occupied as a consultant in broadband transmission problems.

He was named a Fellow of the Society in 1948, and has been Chairman of the Board of Editors since 1955.—Herbert E. Farmer, *Editorial Vice-President*.

Books, Booklets, Brochures

The Changing Role of the Audiovisual Process in Education: A Definition and a Glossary of Related Terms, published as Monograph No. 1 of the Technological Development Project of the National Education Association of the United States, is available as a special supplement (Supplement 6) to the January/February 1963 issue of *AV Communication Review* from Department of Audio-Visual Instruction, 1201 16th St., N.W., Washington 6, D.C. The monograph, edited by Donald P. Ely, is priced at \$3.50.

Part I of the 148-page monograph is on Definition. Part II is on Terminology and contains a 900-word glossary. The purpose of the publication, set forth in the Editor's Introduction (pp. 3-5), is "to define the broader field of instructional technology which incorporates certain aspects of the established audio-visual field." The Introduction notes: "As newer developments in technology have been applied to the problems of education, the audio-visual label has become less useful to describe the field with accuracy. A call for unity and direction has come from many sources within and without the audio-visual field."

The Glossary contains about 900 key terms, selected from more than 2000 terms that were reviewed. Pointing out that "many terms have been accepted regionally or within a specialized segment of the field," the monograph attempts to bring together and define the most widely used terms relating to instructional technology. The major objective is "to define each term so that unity might be achieved."

The Engineering Index Bulletin, published monthly, has been announced by Engineering Index Inc., 345 East 47th St., New York 17. Designed to "bridge the time gap between the publication of engineering developments and the receipt of the abstract thereof," the new Bulletin (with more than 200 pages in each issue) is a guide to current technological literature. The annual subscription is \$250.00.

At the end of the calendar year, contents of the 12 issues of the *Bulletin* are combined in the bound volume of *The Engineering Index*, issued annually, which will be ready for distribution in June. Price of the bound volume is \$85.00. Subscribers to the *Bulletin* may purchase the bound volume for \$60.00.

Books on Radio-Television-Film: A Collection of Recommendations, by Gale R. Adkins, Director of Radio-Television Research at the University of Kansas,

Lawrence, Kan., represents the results of a survey conducted to determine specifically what professional books college teachers believe should be included in the reading experience of students who are preparing for employment in broadcasting. A total of 120 college teachers were invited to submit recommendations and 348 different books were recommended. The 50-page report includes bibliographical data on all books recommended; a report on the number of times each book was included on the respondents' lists; and the respondents' comments regarding each book. A total of 29 categories are listed covering all aspects of the media, including creative, sociological, legalistic and technical.

The 1963 Educational Television Directory prepared by the National Television and Radio Center, 10 Columbus Circle, New York 19, lists educational television stations state by state. The listings include studio address and telephone, date the station began operating, ownership and licensee, transmitter, technical facilities and station personnel.

Profitable Television Troubleshooting: A Step-by-Step Guide to Efficient Professional Servicing of Black-and-White and Color Television Receivers, by Eugene Anthony, has been published in a second edition by McGraw-Hill Book Company, 330 W. 42 St., New York 36, according to a recent announcement. Priced at \$7.25, the second edition has been thoroughly revised and new material added to include new developments since publication of the first edition in 1957. A new chapter on remote controls has been added and the chapters on color TV have been almost completely rewritten to keep step with current practices. The book is mainly of interest to technicians and servicemen.

Technical Review, No. 2-1961, a publication of Bruel & Kjaer, Naerum, Denmark, contains a paper on "The Application and Generation of Audio Frequency Random Noise," by Jens T. Broch. The paper first defines various forms of random noise and then briefly describes some measuring arrangements for the determination of frequency spectra and amplitude distributions of statistically fluctuating signals. Amplitude density curves for acoustical noise in workshops, different pieces of music, and speech are measured and compared to the distribution characteristics of random noise. The author concludes that similarity in the type of distribution indicates that random noise is useful as a sound source for acoustic and electroacoustic measurements and describes a (then) new type of noise generator.

Cathode-ray tubes for military and industrial use are listed in a four-page leaflet available without charge from Westinghouse Electronic Tube Division, P.O. Box 284, Elmira, N.Y. Dimensions and electrical characteristics are given, including typical operating conditions and resolution capabilities, for sizes from 1-in. to 16-in. round faces plus rectangular types.

Series 190 Acoustic Data Measuring and Series 180 Analysis Systems are described in Report No. 865 prepared for B & K Instruments, Inc., 3044 W. 106 St., Cleveland, Ohio, by Bolt Beranck and Newman Inc. of Downers Grove, Ill. The 24-page report (plus Appendix and illustrations) describes the 36-channel measuring system for high-intensity noise in terms of the growing problem of noise from rocket engines. Present-day rocket engines generate as much as 50 million watts of acoustic power, the report states, pointing out that the high-intensity noise produced by the propulsion system of a space vehicle may present problems for the missile itself, the missile launch facilities and neighboring communities.

The systems described in the report are capable of making many measurements simultaneously in the immediate area of the rocket engine and up to distances approximately one mile from the rocket engine. The measured acoustic data normally are recorded on multichannel tape recorders to make them suitable for analysis at a later time.

Current Developments in Educational Television is a 20-page booklet published by National Educational Television and Radio Center, 1619 Massachusetts Ave., N.W., Washington 6, D.C. The booklet summarizes recent developments in educational television, including TV channels, regional activity, network planning, and legislative progress. Educational television

stations now in operation are shown on a map.

A 16-page price list is available from General Film Laboratories, 1546 N. Argyle, Hollywood 28. Items in the booklet include information on prices for processing 35 mm and 16 mm color or black-and-white motion-picture, television and slide films.

The **Quartz-King 500** series of lights is described in a data sheet available from ColorTran Industries, 630 Flower St., Burbank, Calif. The light utilizes the ColorTran B5-29 500-w quartz-iodine lamp with a filament specially designed to operate under boosted voltage conditions with no loss in intensity or color temperature.

The **Videotape Recorder in Education** is a 16-page illustrated brochure published by Ampex Corporation, Video/Instrumentation Division, 934 Charter St., Redwood City, Calif., as a special issue of its publication, Ampex Head Lines. The brochure is available without charge.

Motion-picture and sound equipment is listed in a 104-page catalog available from Behrend's, Inc., 161 E. Grand, Chicago Ill. Listed is such equipment as cameras, recorders, microphone and booms, lighting equipment, editing equipment, sound equipment, projection equipment, and animation cameras and stands. A section listing books is included.

Electric generating plants and their proper selection are discussed in Blue Book F-100-A, available without charge from Onan Division of Studebaker Corp., 2515 University Ave., S. E., Minneapolis 14, Minn. Advantages and disadvantages of using a gasoline, diesel or gas-driven engine to supply mechanical power to the generator are reviewed in terms of original cost, cost of operation and installation requirements.

Diode Circuits Handbook, by Rufus P. Turner, is intended to provide a practical book on diode functions and applications. The circuits included represent a sampling of the uses for conventional diodes, either alone or in conjunction with transistors, varactors and tunnel diodes. The book contains 128 pp., and is 5½ by 8½ in. It is available from the Technical Book Division, Howard W. Sams & Co., 4300 W. 62 St., Indianapolis 6, Ind.

Test Equipment Circuit Manual, by Robert G. Middleton, contains test equipment circuits and specifications for various servicing instruments introduced during the past few years. The content has been planned to assist technicians and engineers in the maintenance and use of their instruments, and for students. The manual contains 192 pp. and is 8½ by 11 in. It is available from the Technical Book Division, Howard W. Sams & Co., 4300 W. 62 St., Indianapolis 6, Ind.

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CONTROL TECHNIQUES IN FILM PROCESSING

Prepared by a Special Subcommittee of the Laboratory Practice Committee of the Society of Motion Picture and Television Engineers

WALTER I. KISNER
Subcommittee Chairman

Foreword by **E. H. REICHARD**
Chairman, Laboratory Practice Committee

CHAPTERS

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| 2. General Principles | 7. Sensitometric Control of a Standardized Process |
| 3. General Aspects of Motion-Picture Film Processing | 8. Chemistry of Film Processing |
| 4. Mechanical Evaluation and Control | 9. Chemical Analysis and Control |
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