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Alfred C. Buensod, 71, died November 25 at his home in Scarsdale, N. Y., after a long illness. He was graduated from Stevens Institute of Technology in 1907 with the degree of Mechanical Engineer. Following his graduation he specialized in air-conditioning processes. In 1930 he designed and installed the \$1 million air-conditioning system in the RCA Building in Radio City. In 1935 he organized the firm of Buensod-Stacy, Inc. He was President of the firm until 1956 when he resigned to become Chairman of the Board. A member of this Society, he was also a Life Member of the American Society of Mechanical Engineers and a Fellow of the American Society of Heating and Air Conditioning Engineers, a member of the American Society of Refrigerating Engineers, Acoustical Society of America and other organizations.

Joseph T. Rucker, 70, a newsreel camera, man whose assignments spanned four decades of tragedy and drama, died October 21 at his home in San Francisco. A close friend of many members of the SMPTE San Francisco Section, he maintained headquarters in that city while roaming about the world on news assignments. His photographic achievements included filming the Admiral Richard E. Byrd Antarctic expedition from 1928 to 1930 for which he received an Oscar and was decorated by the Navy. Other events which he covered included the Japanese earthquake of 1923, Chinese civil wars and the invasion of China by the Japanese. He served with the Navy as photographer during World War II. His career began in 1913 when he joined Universal as newsreel cameraman. Later he was associated with Pathé News and from there went to Paramount. At the time of his retirement in 1954 he had been associated for a short time with NBC News.

**1687 Reasons Why You and Your Company Should Support the American Standards Association** is a 32-page booklet published by the American Standards Association, 70 E. 45 St., New York 17. The booklet points out the importance of standards to international trade and describes the economies effected by the establishment of standards. The booklet is available from the Association upon request.

**books  
reviewed**



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**Manual of Practical Projection**

By Robert A. Mitchell. Published (1956) by International Projectionist Publishing Co., 19 W. 44 St., New York 36. vii + 450 pp., illus., tables, diagrams, 5½ by 8½ in. Price \$6.00.

This book is a practical, concise, useful manual for the professional projectionist. It is well organized and well cross-referenced in a comprehensive index. Every major item in an operating booth is covered. The manual starts with many practical suggestions and much interesting information on motion-picture film and its handling in the booth.

Next, the essentials of a modern projector mechanism are discussed with many practical operating suggestions.

Optics, screens and arc lamps are separately covered, and then a separate section of general projection practices gives many useful and practical suggestions on overall daily projection problems.

Power supplies for the arc lamp, including both motor generator and rectifiers, are fully discussed. Sound reproduction systems from the early disk reproducer down to our current CinemaScope magnetic sound systems are covered.

The last part of the book covers projection of color and 3-D films. Many interesting and practical suggestions are made for improvement in projection. The final chapter is entitled "Useful Projection Formulas." Many formulas directly applicable to the professional projectionist's daily work are listed. Practical applications of these formulas are shown.

The Manual should be of great interest to the professional projectionist as it covers many, many points in which he will naturally be interested; and in addition, it gives many down-to-earth suggestions to help improve the projectionist's daily operation of his booth.—*Ralph H. Heacock*, Medford Lakes, N J.

**Encyclopédie Prisma de la Couleur  
Photo Cinéma**

Published (1957) by Les Editions Prisma, 26 Rue Desbordes Valmore, Paris 16, France. 247 pp. + 3 pp. index + i-xxxii advertisements. 32 color illus. 6¼ by 9 in. Price 3,330 f.

This book was compiled under the direction of M. Dérivé, the Secretary General of the Center for Color, and L. Caillaud. The various sections were prepared by ten individuals, each well versed in the subject matter which he contributed. This type of preparation has led to a book in which the various subjects are well handled but in which the style and emphasis vary a great

deal from section to section and in which there is some duplication of material. Being an "encyclopedia" the subjects are presented in alphabetical order so that related material is sometimes widely separated, but cross references (voir le mot) are numerous.

The aims of the book can best be described by quoting the preface: "... We know from experience that the photographer is inquisitive, the true amateur by definition, the professional because his knowledge must always meet the requirements exacted by daily practice.

"For both, we have endeavored to assemble in this work all the background of color photographic reproduction. The latter is examined in its scientific aspect, since from this theoretical part flows the techniques of the different processes, of the practice of taking and of printing. Likewise, a theoretical study of our vision gives knowledge of the manner in which we see the color of the subject and the way to interpret it.

"We have avoided intentionally the discussion of both motion-picture and photographic exposure in general, because this subject has been discussed amply in the field of black-and-white photography. The same can be said about the material common to all processes. We have tried to cover only the color phase.

"It is no accident that this work is published on the fiftieth anniversary of the Lumière brothers' gift to photography, the first Autochrome plate, from where, often by divergent ways, we have acquired the power of reproducing color."

The "theoretical" or tutorial treatments include sections on Colorimetry, Color, Couplers, Photomechanical Printing, Light, Masks, Photographic Objectives, Photometry, Reproduction of Color, Sensitometry, Color Vision, Printing (negatives to positives, and positives to positives), Stereo Photography, and many others. The sections on Light and on Printing are particularly thorough. A section on Quality is an excellent combination of discussions of color sensitometry and the reproduction of colors, tone reproduction, definition, edge effects, and graininess.

In another style of presentation are sections describing techniques for photographing Infants, Exteriors, Flowers, Fluorescence, Interiors, Medical Subjects, the Sea, Mountains, at Night, Portraits, Under Water, Stained Glass Windows, and in Caves.

Descriptions of the various color processes which have been used in the past and color photographic products which are now in use are included, although the thoroughness with which each process or product is described is not consistent from one to the other. For example, one-half a page is devoted to Technicolor, while a whole page is devoted to Supercinecolor. Tabulations of the processing steps for Agfacolor (negative-positive), Anscochrome, Ektachrome, Ektacolor, Ferrania (reversal), and Telcolor (negative-positive) are included.

In other sections dealing with the "practical" are subjects such as Cameras, Verification of Shutter Speeds, Make-up, and Projection. Filters are dealt with in a great deal of detail.

A number of beautiful color photo-

graphs are reproduced, the originals being Kodachrome, Ektachrome, Ferraniacolor, and Agfacolor. In addition, excellent color plates illustrate subtractive and additive color mixture, screen plate color process, lenticular process, a variety of subtractive processes, and photomechanical printing.

Although this book has the usual disadvantages of an encyclopedia, varying style, separation of related subject matter, and repetition, these characteristics probably add effectiveness. The French reader will probably spend more time at each sitting and will become interested in a wider variety of subjects than he anticipated. It is a real contribution to the French literature in the field of photography.—*W. T. Hanson, Jr.*, Eastman Kodak Co., Kodak Park, Rochester 4, N.Y.

## Handbook of Industrial Electronic Circuits and Handbook of Industrial Electronic Control Circuits

By John Markus and Vin Zeluff. Published (1948 and 1956) by McGraw-Hill Book Co., 330 W. 42 St., New York 36. First volume: vx + 272 pp., illus., 8½ by 11-in., price \$7.50; second volume: xiv + 352 pp., illus., 8½ by 11-in., price \$8.75. Price for both volumes \$16.25.

The above two volumes make excellent reference material for the circuit development engineer and system planner. The set further makes interesting reading in the same sense that one occasionally browses through an encyclopedia at random.

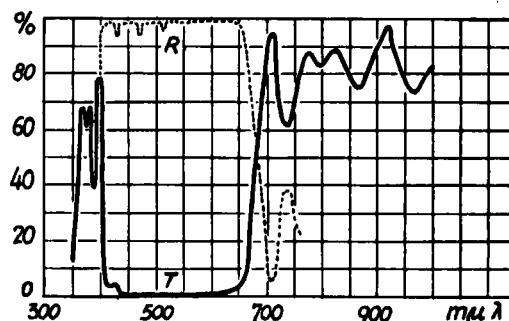
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The two books form companion volumes covering circuits current at different times and covering slightly different emphasis as to type of circuit. The first volume contains circuit designs which were evolved between 1935 and 1948. The second covers the period up to 1955. As the titles imply there is more emphasis in the second volume upon industrial control applications.

The following list of sample subjects covered is given in an attempt to indicate the scope of these books. This will furnish an indication to the reader, who will realize that the list can hardly do justice to the full scope of over 800 different articles.

- Amplifiers (D-C, Power Frequency, Pulse, Audio, Linear-to-Logarithmic, etc.)
- Capacitance Control Circuits — including the measuring of capacitance and the indirect measuring of thickness and position
- Cathode-Ray Control Circuits such as Sweeper, Synchronizing, and Electronic Switching Circuits
- Counting Circuits
- Metal Detector Circuits
- Motor Control Circuits
- Oscillators
- Photoelectric Circuits
- Remote Control Systems
- Sorting Circuits
- Timing Circuits
- Control Circuits using Ultrasonic Waves
- Welding Control Circuits

There appear to be no circuits using ferroelectric elements, or any circuits

using magnetic cores for counting or logic elements.

The reader will find that these volumes contain a distillate of circuits taken from *Electronics* magazine. The authors have chosen these circuits to represent typical applications and have covered the field very well. The articles describing these circuits are carefully worded for completeness and understandability. The descriptions of operation are clear and easy to read and appear to leave no conspicuous holes in the explanation.

Many of the circuits in the earlier volume are out of date since old types of tubes are used and no transistor circuits are included. Even so the articles are of interest because they suggest basic circuits which the reader can probably adapt to more modern electronic devices. The latter volume describes circuits using more modern tubes and in addition has a small section (35 pp.) on transistor circuits. These use transistor types which were available during 1952 and 1953, and an interchangeability chart would be needed to fit later types into these circuits.

While it would be impossible to expect to find every type of circuit included which a reader might wish to look up, the omission of any typical slicer and other threshold-responsive circuits seemed conspicuous to this reviewer.

The completeness of index references make these volumes especially valuable for handbook purposes.—*W. R. Young, Jr.* Bell Telephone Laboratories, 463 West St., New York 14.

## The Focal Encyclopedia of Photography

Edited by Frederick Purves. Published (1956) by Focal Press Ltd., 31 Fitzroy Square, London, W.1.; U.S. Publisher (1957), Macmillan Co., 60 Fifth Ave., New York 11. xxxii + 1298 pp. 6½× by 9-in. 33 plates (140 pp. black-and-white, 8 pp. in color). Price \$20.00.

*The Focal Encyclopedia*, described by earlier reviewers as "herculean," "a magnum opus," "fabulously comprehensive," is all of these. Indeed, if there is a fault to be found, it is that it is too comprehensive in that it attempts to cover the entire field of photography on all levels, including all aspects—scientific, historical, artistic—with a consequent loss of thoroughness in some areas. For example, "Chronology of Photographic Inventions" (pp. 151-155), which lists 214 photographic inventions between 1725 (J. H. Schulze: Experiments on light sensitivity of silver salts) and 1950 (Coloured couplers for self-masking colour correction), seems a little arbitrary. The theory which prompted the selection of one invention rather than another is obscure to this reviewer.

The references say seem meagre from the point of view of the researcher. The lack of references, however, is not an oversight but represents editorial policy. In the publishers preface it is explained that references have been held to a minimum to assist the reader "in finding the most readily available complete monograph on the subject in question rather than confuse him by listing a wide choice of alternatives."

Some readers may feel that too much space or weight has been given to some subjects and not enough to others.

The reviewer is well aware of the dangers of attempting an honest evaluation of such a monumental and inclusive work; any criticism is apt to seem carping and objections to this or that, the merest lint-picking. This is certainly a monumental work and one of great and continuing value not only to the scientist and artist in the field of photography but to the literate person whose interests encompass significant developments in many fields.

The items in the Encyclopedia are, of course, arranged alphabetically, beginning with Abaxial and ending with Zoom lens, but as an added assistance to the reader the book contains a synopsis of subject divisions. Subject headings include: The Photographic Process; Equipment and Materials; Optics; Camera Management; Image Management; Camera Subjects; Processing and Chemistry; Printing, Enlarging and Finishing; Colour; Projection and Viewing; Applied Photography; Cinematography; Industry, Commerce and Organization; History.

The book is further enhanced by 140 pp. of illustrations in black-and-white and 8 in color, which illustrate developments and techniques of the photographic art. Subjects illustrating techniques and artistic trends include insects and elephants, nudes and airplanes, among many others.

The Editorial Board, aided by 46 consultants, spent more than 10 years on the project, which "grew" from the original plan for a book of about 300,000 words to

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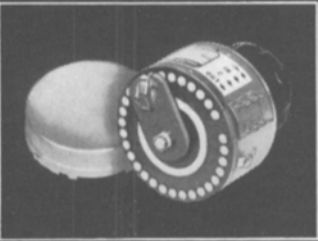
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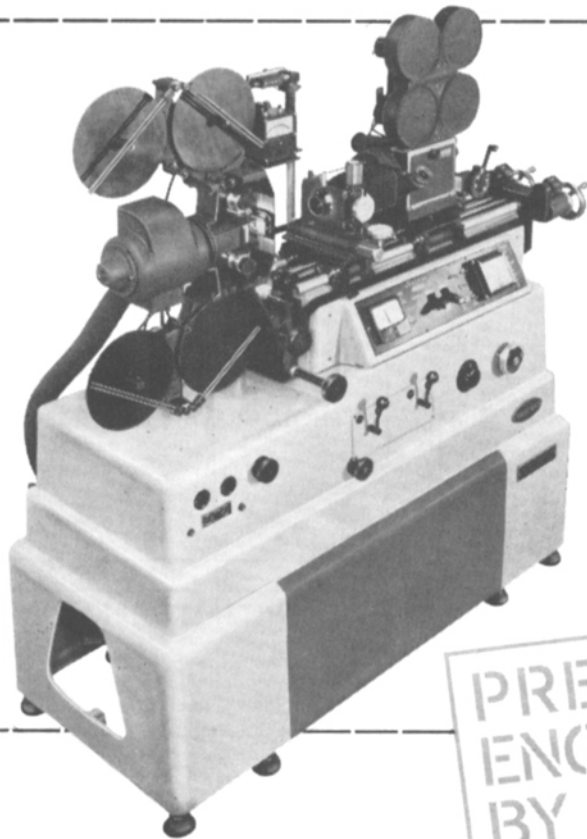


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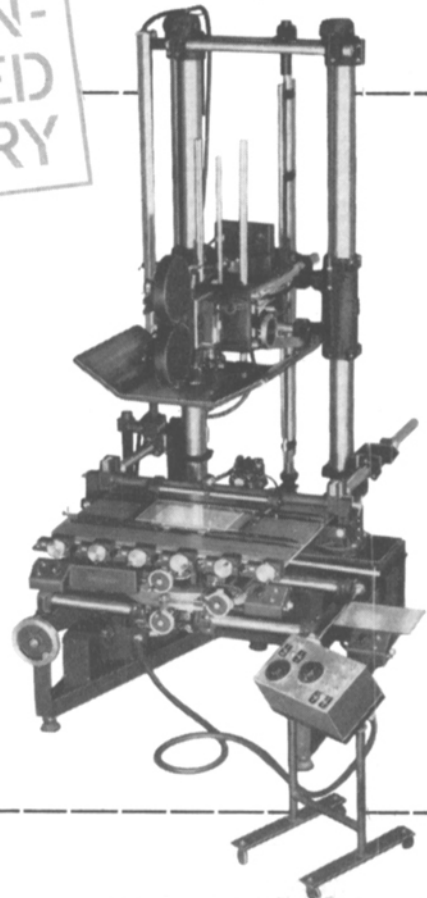
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**Profitable Television Troubleshooting**, by Eugene A. Anthony, is a practical guide to servicing black-and-white and color television receivers. Published (1957) by McGraw-Hill Book Co., 330 West 42 St., New

York 36, the book contains 488 pages, 227 illustrations and is priced at \$6.95. It is planned to be especially helpful to radio servicemen who are interested in acquiring sound information that will enable them to service modern television sets. Included is practical information about the larger domestic color sets and modern circuits.

**The Radio-Electronic Master, 1958** (22d ed.), published by United Catalog Publishers, Inc., 60 Madison Ave., Hempstead, N.Y., became available in November. The 1584-page catalog lists more than 150,000 products of 350 manufacturers and contains 11,500 illustrations. It may be obtained from electronic parts distributors.

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