

much good humor was generated by these witty gentlemen. The question-and-answer period was lengthy due to the great interest in Photokina of the members and guests. The meeting was preceded by a dinner at King's Four-In-Hand. — Don V. Kloepfel (Secretary-Treasurer), DeLuxe General, Inc., 1546 N. Argyle Ave., Hollywood, CA 90028.

RYERSON POLYTECHNICAL INSTITUTE STUDENT CHAPTER, 8 Oct. —

The Chapter held its first meeting of the year in the Photographic Arts Building of Ryerson Polytechnical Institute with an attendance of 40 members. The speaker was Edward V. Malec of Kodak Canada Ltd. who presented


an informative paper on Eastman Color Negative films 5247 and 7247. The presentation was enhanced by slides and by an impressive demonstration film. Two 16mm projectors were used in comparing the 5247 and 7247 films with ECO film and subsequent generations.

Linda Hutch, the Chapter Chairman, spoke on the (then) upcoming SMPTE Conference in Toronto. Twenty-five new members have been enrolled so far — Ted Morris (Secretary-Treasurer), Ryerson Student Chapter, 122 Bond St., Toronto, Ont. M5B 1X8, Can.

HOUSTON, 29 Oct. — The meeting was

held at the Veterans Administration Hospital with an attendance of 35 members and guests. The speaker was Donald E. Bodley of Bodley Associates who spoke on "The Psychology of Color and Human Motivation." He gave an extremely interesting presentation on color psychology demonstrating the significance of color in motion pictures and television and its impact on the viewers. He explained how color can be manipulated and used to obtain desired responses. His presentation was enthusiastically received by the audience. — Leonard M. Hart (Secretary-Treasurer), Medical Illustration Service, Veterans Administration Hospital, 2002 Holcombe Blvd., Houston, TX 77031.

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Optical Radiation Measurements: Stability and Temperature Characteristics by Kshitij Mohan, A Russell Schaefer and Edward F. Zalewski (National Bureau of Standards Technical Note 594-5 (1973) 16 pp. 35 cents. Available from Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.) is a study comparing the relative performances of selenium barrier layer cells with PIN and PN type silicon photodiodes operated in the photovoltaic or nonbiased mode.

Time-Life Video, Time & Life Bldg, Rockefeller Center, New York, NY 10020, has announced availability of a 40-page illustrated catalog containing descriptions of more than 150 programs. Most of the programs are available in 16mm format as well as on videotape. The programs are nontheatrical and include such well known items as *Civilisation* with Kenneth Clark; Alistair Cooke's *America* and the *Time-Life Video Speed Reading Course* with Dick Cavett as its guest instructor. The catalog contains an index and a price list showing both the purchase price and rental rate for each program.

Space-Age Film, a four-page illustrated data sheet available from Metro/Kalvar Inc., 745 Post Rd., Darien, CT 06820, describes four Metro-Kalvar films. The films require no darkroom or chemical processing. They are made of a tough plastic emulsion coated on a polyester base. In use, the film is exposed to ultraviolet light to form a latent image and heated to permanently develop the image. In the finished print the opaque area of the developed image is composed of light scattering centers rather than light absorbing grains or dyes as in conventional silver halide films.

Tungsten-halogen lamps for industrial and commercial applications, including television studio and theater, are described in an 8-page brochure illustrated in color (Booklet TH-102) available from GTE Sylvania, Advertising Services Center, 70 Empire Dr., West Seneca, NY

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14224. The firm has a broad line of tungsten-halogen lamps for spotlighting, floodlighting and general applications.

TKO Chemical Co., Inc., 303 S. 5 St., St. Joseph, MO 64501, has prepared a 9-page report showing the comparison of four different hypo elimination tests. It is available at a price of 50 cents. The firm produces Orbit Bath® and O-Fix to be used in the laboratory to reduce time, water and contamination.

Video instruments, including converters, generators, and analyzers are illustrated and described in a 4-page short-form catalog available from Colorado Video Inc., P.O. Box 928, Boulder, CO

80302. Also available is a poster-size diagram described as a "freebie super-maze" designed to "challenge your perceptions."

The **Editing Equipment Catalog** and the **VTR Equipment Catalog** are available from Camera Mart Inc., 456 W. 55 St., New York, NY 10019. The 12-page **Editing Equipment Catalog** contains illustrations and descriptions of editing equipment including the Moviola editing console and Moviola editing machines. Such items as power rewinders, synchronizers, viewers and splicers are included. The 12-page **VTR Equipment Catalog** contains illustrations and descriptions of Sony and Akai cameras, recorders, accessories and supplies.

The **Spectra Model 1980 Pritchard Photometer** is described in a 4-page illustrated leaflet (Bulletin No. 520) available from Photo Research, Div. Kollmorgen Corp., 3000 North Hollywood Way, Burbank, CA 91505. The instrument provides automatic computation of readings for all combinations of built-in filter, aperture and range settings. Features include full-scale sensitivity ranges from 0.00001 to 10,000,000 (10^{-5} to 10^{-7}) fL at distances from 0.001 in to infinity. Built-in apertures allow selection of measuring fields from 2 min to 3.2". Features also include freedom from polarization error.

Accessories for the Spectra Model 1980 Pritchard Photometer are described and illustrated in Product Bulletin No. 522 available from Photo Research, Div. of Kollmorgen Corp., 3000 North Hollywood Way, Burbank, CA 91505. The accessories are in five major classes: (1) optical accessories, including two Cassegrain telescope objectives, color temperature iris diaphragm, filter holder, external calibrating light source, and micro-cell for adapting standard microscope objective to the photometer; (2) illuminance measuring accessories, including an illuminance baffle, cosine receptor, reflectance standard and fiber optics probe; (3) portable rechargeable ac power supplies; (4) tripods, supports, and x-y translators; and (5) foam-lined, impact-resistant carrying cases.

Super-8 sound film projectors marketed by the Industrial Products Div. of Fairchild Camera and Instrument Corp., 74 Mall Dr., Commack, NY 11725 are described and illustrated in a 8-page brochure. The projectors are designed especially for use in sales, education and training programs.

The **Sanyo VTC 7100**, a videocassette recorder, is described and illustrated in color in a 16-page brochure available from Sanyo Electric Inc., 1200 West Artesia Blvd., Compton, CA 90220. The recorder, which weighs 15 lb, utilizes a ½-in tape cassette measuring 4½ by 6½ by 1 in having slow-motion and still framing capability.

Packaged Luxtrol Light Controls are described and illustrated in a 12-page bulletin available from Superior Electric Co., Bristol, CT 06010. The dimmer packages are rated from 7200 to 15,000 W and can dim, brighten and blend light.

The **PDS computer-controlled film reader System 200** with digital input is described in a 10-page illustrated brochure available from Photo Digitizing Systems, Inc., 820 S. Mariposa St., Burbank, CA 91506. The brochure discusses applications and features and provides specifications.

The **IEEE Standards 1974 Catalog** is available from the Institute of Electrical and Electronics Engineers, Inc., 345 E. 47 St., New York, NY. The catalog contains 32 pages and lists more than 350 published standards by subject as well as in numerical sequence. Included in the listings are the many American National Standards published by IEEE which cover many fields and set forth criteria for test methods, practices for electrical installations,

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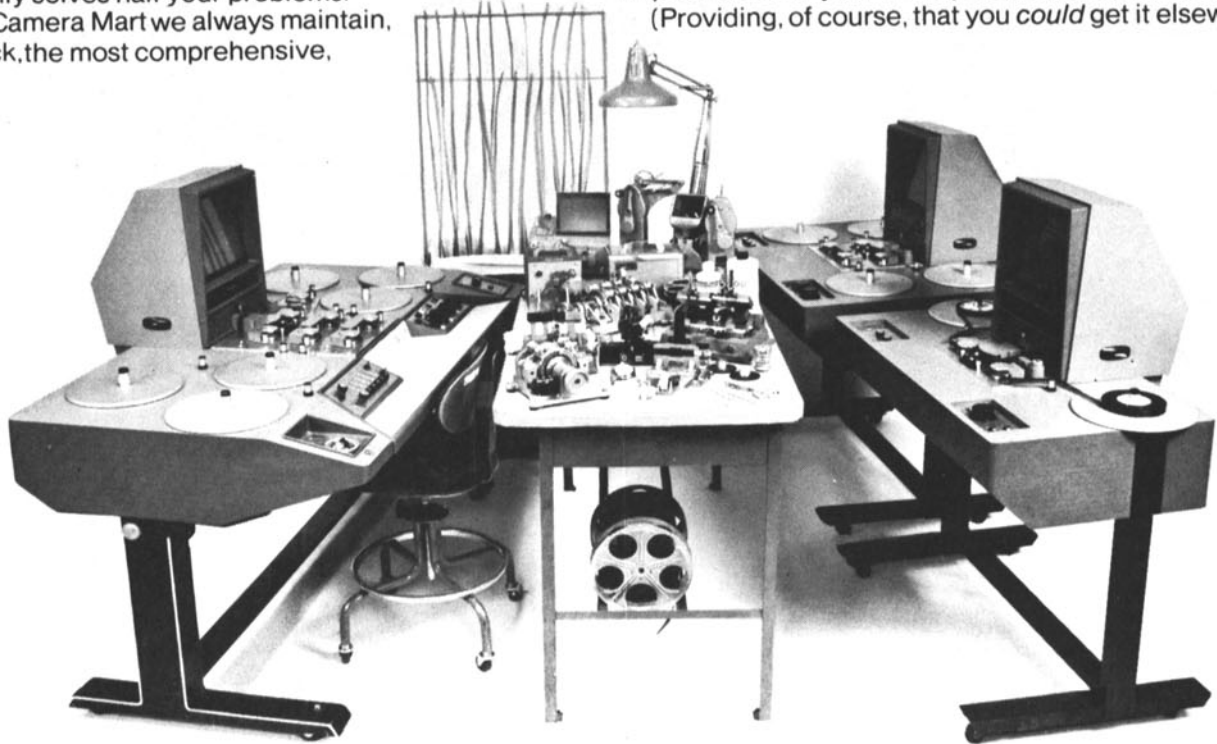
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A dual electronic timer in the form of a monolithic integrated circuit is described and illustrated in data sheets available

from Signetics Corp., 811 East Arques Ave., Sunnyvale, CA 94086. The data sheets contain diagrams and explanations of the various applications of the timer, designated NE/SE 556.

**books
reviewed**



Modern Sound Reproduction

By Harry F. Olson. Published (1972) by Van Nostrand Reinhold Co., 450 W. 33 St., New York, N. Y. 10001. 335 + xiii pp. Diagrams. 6 by 9 in. Price \$18.50.

In the preface to this book the author states "that the main objective is to present a detailed technical exposition on the essential elements and systems of modern sound reproduction systems for a wide range of readers including scientists, engineers, technicians and audio laymen and enthusiasts." Insofar as covering the entire gamut of sound recording and reproducing systems, the author seems to meet his desired objective. The book covers in some detail the present fad of quadraphonic magnetic tape systems and appears to give it the author's blessing. His material on acoustically active architectural enclosures for sound reinforcement systems represents advance practices in the design of such systems.

In endeavoring to cover the whole sound reproduction field in a volume of 328 pages the author has had to eliminate much information which would have made the book a source of wider information. His elimination of the derivation of mathematical formulae limits the use as a textbook in engineering courses. The absence of practically all design data limits its value to design engineers. The most redeeming feature of the book is the excellent illustrations which will help make the text more understandable to audio laymen. However, the use of this book in conjunction with some of Dr. Olson's previous texts should prove enlightening to anybody engaged in the audio field.

In his discussion of quadraphone recording and reproducing systems he states that this system simulates direct listening in that it provides auditory perspective as well as the correct reverberation envelope. This is probably correct if two single microphones are used to provide the auditory perspective. But if, as he states later, 18 to 24 microphones may be employed to pick up individual instruments and the resulting tracks may be manipulated at will in the recording and re-recording process to produce artistic effect, it is doubtful if acoustic realism is retained in the final two-track or quadraphonic system.

Dr. Olson fails in a few places to recognize

practices or techniques with which he has had little or no direct experience. Thus in Chapter 10 he makes no mention of the variable-density method of optical sound recording, which, although temporarily in eclipse, was the principal method of film recording for the first 30 years of sound pictures and which only awaits some new approach for renewed usage. It is, of course, assumed that this deletion was an oversight on Dr. Olson's part and that no personal bias in any way entered into his judgment to ignore the subject. — *John G. Frayne*, 1580 La Loma Rd., Pasadena, CA 91105.

Laufbildprojektion (in German)

By Herbert Tümmel. Published (1973) by Springer-Verlag, Moelkerbastei 5, 1010 Vienna, Austria (Springer-Verlag New York, 175 Fifth Ave., New York, NY 10010). 396 pp. Illus. Diagrams. 6½ by 9½ in. Price \$71.20 (DM 158).

To come across these days not only an ordinary new book on motion-picture projection but one that is encyclopaedic in scope and tutorial in depth is more than any one in the profession could expect. *Laufbildprojektion (Motion Picture Projection)* is the sixth in the ten-volume series *Die wissenschaftliche und angewandete Photographie (Scientific and Applied Photography)* which in turn is a revival and an enlargement by Kurt Michel of Hay and von Rohr's *Handbuch des wissenschaftlichen und angewandeten Photographie (Handbook of Scientific and Applied Photography)* presently carried on by Josef Stüper. The author is a renowned expert in Europe on motion-picture theater equipment and in the book he spans a century and a half of the visual aspects of motion-picture projection technology, from early in the 19th century to the present time. There is hardly a stone unturned about the visual projector. Newcomers to the field are liable to be surprised in reading the book that large screen techniques through wide film are not inventions of the fifties. Sound equipment, optical and magnetic, is mentioned only in passing.

The book has 15 chapters and starts with the human senses, concentrating on the sense of sight. Subsequent chapters, among other things, introduce the reader to photometry and explain the sense and purpose of the projector, its construction, its various methods of lubrication and the film motion through it. It covers optics, light sources, film formats and film materials and quality of projection. These aspects are explored not only for the professional projector with the most frequently used format of 35mm film but also for the 8mm home projector and through every intermediate format projector to the 70mm machine. Of special historic interest is the round-up of unusual vintage equipment such as left-handed, dual, twin and double projectors. At the other extreme the book discusses continuous loop, reverse motion, add-on, variable speed, two-film, NTSC and CCIR television