

use of such films, details of S.F.A. activities, and other information of interest to all concerned with the application of films to scientific and industrial problems. The other three issues are usually devoted to films on specific subjects (e.g. atomic energy, building and construction, chemistry, economics, industrial training, physics, etc.)

The S.F.A. also distributes, free to its full and corporate members, *Science and Film*, which is the quarterly journal of the International Scientific Film Association, whose headquarters are in Paris (37 Ave. des Ternes, Paris 17). This publication, which is in a format similar to that of the *Scientific Film Review*, is in its sixth volume. It contains articles from contributors all over the world, who discuss

the development and use of scientific and industrial films in their respective countries.

Through viewing panels, meeting in London as well as in other parts of England, the S.F.A. makes critical appraisals of scientific and industrial films, indicating suitability for various types of audience. These findings are used in compiling catalogs of films by subject matter, which are sold by the Association as a working tool for film users.

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## section reports



The Hollywood Section met on March 19 at the ABC Television Center, Hollywood, with an attendance of approximately 275. The meeting was opened with a 16mm color film supplied by Douglas Aircraft Co., *The Navy's F4D Skyray, Spearhead of Defense*.

Marvin B. Jacobs, television and optics engineer for American Broadcasting Co., gave an excellent talk and demonstration of the 100-in. lens employing reflecting, telescope-type, optics, and having an effective aperture of approximately  $f/5.7$ . The TV camera was focused on an RETMA test chart approximately 90 ft away, to show the excellent definition and freedom from distortion achieved with this unique lens. This lens was developed by ABC and used at the Republican National Convention and at the recent presidential inauguration in Washington, D.C.

A. W. Vose, of Radio Corp. of America, gave a talk, illustrated by slides, on the development and implementation of the RCA AVQ-10 Weather Radar. This radar permits a pilot to "look" ahead of his flight up to 150 miles to determine the best course for avoiding thunder storms and for penetrating storm fronts and squall lines.

United Airlines needed a pilot training film to acquaint pilots with the proper operation of the RCA weather radar. This film was produced by Thomas J. Barbre Productions in Denver. Some of the unusual production problems, including the radar scope photography necessary in this production, were described by Paul Emrich of the Barbre Company. This talk was followed by the showing of the 40-min, 16mm color film *United's New Look* which was filmed from a United Airlines Convairliner on a trip over the midwest plains states through thunderstorm activity. The film showed views of the thunderheads taken from the airliner cabin and then showed their presentation on the weather radar scope. The commentary on the soundtrack, provided by a United Airlines radar expert, described the various pertinent details on the radar scope that enabled the pilot to analyze the severity of the various cells in the storm and to find a corridor for safe penetration of the storm area.—Robert G. Hufford, Secretary-Treasurer, c/o Eastman Kodak Co., 6706 Santa Monica Blvd., Hollywood 38.

The Chicago Section met on February 28 at the Processing Laboratory, Eastman Kodak Co., Chicago, with an attendance of about 400.

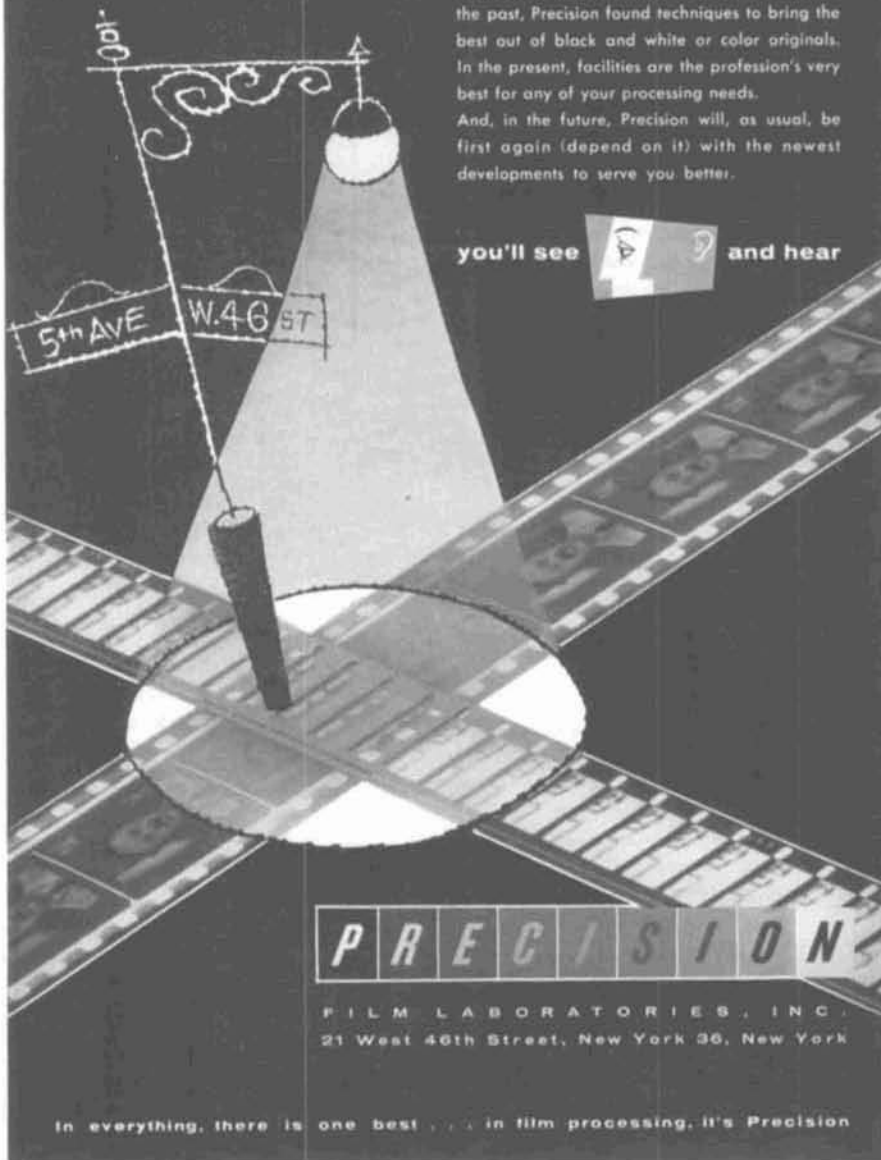
Three papers were presented by members of the technical staff of the Eastman Kodak Processing Laboratory. The first paper, "Silver Recovery and Solution Rejuvenation," by Frank E. White, Supervisor of Engineering Maintenance, covered various methods for the recovery of chemicals and silver from exhausted solution. In "Color Processing Control Techniques" Atwood G. DeCoster, Supervisor, Quality

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Control, described the photographic, chemical and mechanical controls necessary to assure color process stability. George C. Myers told "How to Make Kodachrome Photographic Prints From Color Transparencies," in a paper describing in detail the techniques involved.

Following presentation of the papers, the group was taken on an inspection tour of the Laboratory. Ten stations were set up throughout the plant where summaries of the operation were presented by members of the Eastman Kodak staff.—*H.H. Brauer*, Secretary-Treasurer, c/o Bell & Howell Co., 7100 McCormick Rd., Chicago 45.

The Chicago Section met on March 27 at the Prudential Building with an attendance of 65. Speakers were O. H. Coelln, Editor and Publisher of *Business Screen*, and Otto Rauhut of Wide Range Recording Co.

Mr. Coelln, who spoke on "New Horizons in Production: The Road Ahead for Business Film Producers and Sponsors," showed sections of several outstanding films from the sponsored film field. These illustrated the sort of opportunities available to sponsors. One film was screened before more than 42 million people in 1956. The speaker explained that the sponsored film is a rapidly growing field, with approximately 215 producers in 1956, as compared with 180-200 in 1955.

This group, Mr. Coelln said, produces about a thousand 16mm sound films a

year. There are 50 to 100 prints of the average film, although releases of 350-400 are now being made. Mr. Coelln emphasized the desirability of 350-400 prints, in order to cut down on the waiting time for a film. At the present time, sponsors are obtaining, on the average, about four showings per print per month. Efforts are being made to speed up the handling of prints. TV prints, Mr. Coelln emphasized, are just beginning to emerge. This field, he said, offers an exciting and dynamic opportunity to all producers.

In the second paper, "A Magnetic Film Sound Recorder of Advanced Design," Mr. Rauhut reviewed the design features of a new magnetic film sound recorder. Some of the advance features of this equipment include recording on either 16mm or 17½mm film, two-speed operation with the flip of a key switch, and low wow-flutter performance.—*H. H. Brauer*, Secretary-Treasurer, c/o Bell & Howell Co., 7100 McCormick Rd., Chicago 45.

The Rochester Section met March 28, at the Gallery Theater in the Memorial Art Gallery, Rochester. The unusual program featured a talk on "Building Modern High-Fidelity Systems With Components" by Fred P. Beguin, General Electric Co., Syracuse. Mr. Beguin brought a considerable amount of equipment with which he demonstrated stereophonic sound, binaural sound, etc. The meeting announcement had extended an invitation to members to bring along favorite records.—*A. E.*

*Neumer*, Secretary-Treasurer, c/o Wollensak Optical Co., 850 Hudson Ave., Rochester 5, N. Y.

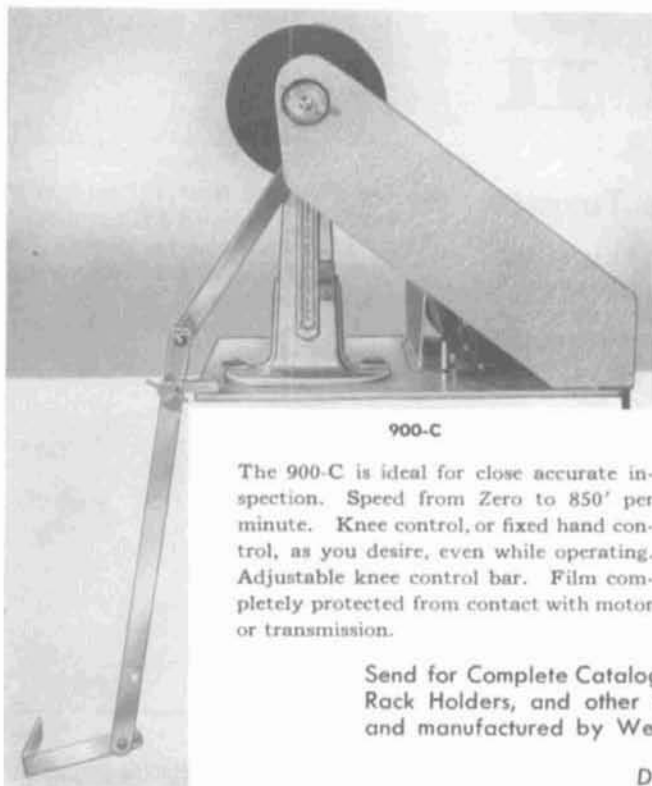
The Canadian Section held its first meeting March 28 at the Toronto Office of the National Film Board. Sixty-five members and guests heard Ethan M. Stiffe, SMPTE Sections Vice-President, explain the programs and objectives of the Society.

Don Dixon of Eastman Kodak was named to succeed Ron Ringler of Du Pont as Membership Chairman, and Ivor Lomas of Crawley Films was appointed Program Chairman. The Interim Board of Officers of the Canadian Section will hold their positions until the Fall election.

The Board is as follows: Chairman, R. J. Beaudry, Shelly Films Ltd.; Secretary-Treasurer, R. E. Ringler, Du Pont of Canada; Board of Managers, Ray Payne, National Film Board; Lou Wise, AVRO Canada; R. Laidlaw, CFPL-TV; D. Spring, Canadian Kodak; N. Olding, CBC; and I. Lomas, Crawley Films.—*R. E. Ringler*, Secretary-Treasurer, c/o Du Pont Co. of Canada (1956) Ltd., 85 Eglinton Ave., E. Toronto, Canada.

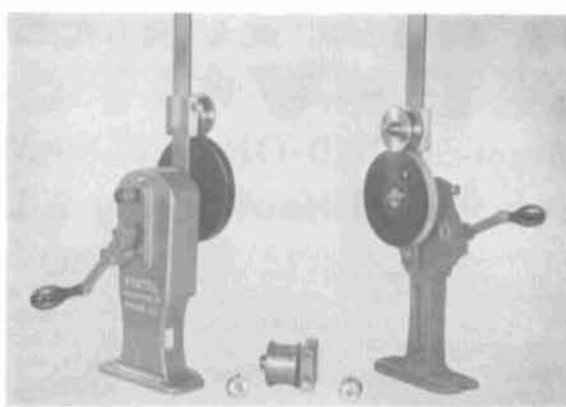
The San Francisco Section, at an interesting and unusual meeting on April 9 at Leo Diner Films, heard papers on audio-visual education in our public schools.

Carl B. Manner, Director of Audio-Visual Education in the Vallejo School System, described the program in effect



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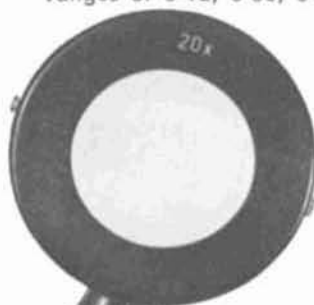
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in his area, illustrating his talk with examples of the visual aids employed. He also had on hand a variety of new equipment that is used in the schools today.

Bill A. High, Director of Photography for the Oakland Junior College, gave a talk on the standards which must be met to pass the College's two-year course in photography. Mr. High brought with him a series of pictures produced by the students of the school with which he pointed out that the school is concerned with commercial aspects rather than the fine arts. The work of the classes covers approximately 80% still and 20% motion-picture photography, and quality is kept very high.

Leo Diner, of Leo Diner Films, wound up the meeting with an informal rundown on

some of the highlights of his recent tour of duty with the San Francisco Ballet in the Far East. Mr. Diner was in charge of the tape sound equipment on the trip. It was promised that at a future meeting he would give a complete account, with some of the many slides and motion pictures taken during the tour.—*Werner H. Ruhl*, Secretary-Treasurer, 415 Moline Dr., San Francisco, Calif.

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## **books reviewed**

### **Television Engineering Handbook**

Donald G. Fink (Editor). Published (1957) by McGraw-Hill Book Co., 330 W. 42 St., New York 36. 1483 pp. + 22 pp. index, Illus. 6 X 9 in. Price \$18.00.

The intent of Don Fink in preparing the *Television Engineering Handbook* can best be expressed by the following quotation from its Preface:

"The development of the techniques of television engineering, following the establishment of the compatible color system in the United States and the extension of monochrome broadcasting throughout the world in four major systems based on different standards, has reached such a point that no individual engineer can command all of the quantitative data required to design and operate television equipment. This situation has two consequences: there is a need for a unified compilation of these data, and the compilation must be prepared by a team of specialists. The *Television Engineering Handbook* is intended to fill this need."

The degree to which this objective has been attained is suggested by this list of the chapter headings: (1) Numbers, Equations, and Definitions; (2) Television Standards; (3) Monochrome Vision, Photometry, Illumination, and Optics; (4) Color Vision and Colorimetry; (5) Cathode-Ray Devices; (6) Scanning, Deflection, and Color Registration; (7) Synchronization of Scanning and Color Coding; (8) Transmission of Monochrome Information; (9) Transmission of Chrominance Values; (10) Composite Video Signals, Waveforms, and Spectra; (11) Video Amplification and D-C Restoration; (12) Wideband Amplification (Radio and Intermediate Frequency); (13) Wideband Modulation and Demodulation; (14) Wave Propagation, Radiation, and Absorption; (15) Television Receivers — Circuit Functions and Block Diagrams; (16) Television Receivers — Circuit Design and Component Specification; (17) Camera Chains and Related Equipment: Part I — Monochrome Systems, Part II — Color Terminal Equipment; (18) Coaxial Cables, Microwave Links, Relays, and Networks; (19) Television Transmitters and Auxiliary Equipment; and (20) Transmission Lines and Radiators.

The first chapter is written in true handbook form, that is, the material in this chapter represents a collection of facts and figures with a bare minimum of descriptive or expository material. The remainder of the book, however, consists of a number of essays on various phases of the problems arising in television engineering. This