

the overall combination of compression and expansion were not complementary. A considerable variation from the 1:1 ratio was found to be acceptable. In this respect, the Nutcracker Suite from Walt Disney's *Fantasia*, projected at a 3:1 screen aspect ratio, was found to be very effective.—*E. W. Templin*, Secretary-Treasurer, Pacific Coast Section, % Westrex Corp., 6601 Romaine St., Hollywood 38.

The Southwest Subsection met jointly with the I.R.E. and A.I.E.E. in Karcher Auditorium on the Southern Methodist University campus, Dallas, February 19. Axel G. Jensen, Director of Television Research, Bell Telephone Laboratories, and SMPTE Engineering Vice-President, spoke on the present status of color television. Starting with a résumé of the color television hearings before the FCC in 1950-51, Mr. Jensen covered the many interesting developments that led up to the present system of compatible color television. A very worthwhile discussion followed the talk. Unusually bad weather kept attendance at this meeting to about 100.—*W. W. Gilreath*, Secretary-Treasurer, Southwest Subsection, 3732 Stanford St., Dallas, Tex.

## Engineering Activities

Ten committees, listed below, are scheduled to meet concurrently with the 75th Convention in Washington, D.C. As usual, the meetings will be open to all and neither lack of committee nor Society membership will be a bar to participation in these deliberations.

- Color
- Film Dimensions
- Film Projection Practice
- High-Speed Photography
- Optics
- Screen Brightness
- Sound
- Television
- Television Studio Lighting
- Theater Television

An Engineering Committee Manual describing committee procedures, processing of American Standards and the overall Engineering operations is in a final stage of preparation and should be off the press shortly. This will be distributed to all com-

mittee members and to those interested parties who request a copy.—*Henry Kogel*, Staff Engineer.

## Obituary

**David P. Boyle**, Consulting Engineer, died on January 6, 1954, at his home in Pacific Palisades, Calif., at the age of 36.

After graduating "cum laude" from Dartmouth College in 1940, Dave Boyle joined the Research Laboratory of Eastman Kodak Co. at Rochester and spent a year there before going to Washington to do research work for the Navy. At the outbreak of war he joined the Signal Corps, went to England, and worked there with the Royal Air Force on airborne radar. After further training at Bell Laboratories in the U.S. Dave took the latest air radar equipment to Guam, where it was effectively used by our bombers in destroying the Japanese oil refineries. Upon release from the Army he joined the Pathe Industries, and was there until the time of his death from cancer.

## Book Review

### Techniques of Television Production

By Rudy Bretz. Published (1953) by McGraw-Hill Book Co., 330 W. 42d St., New York 36. Television Series, Donald G. Fink, Consulting Editor. xii + 464 pp. + 10 pp. index. 377 illus. 6 × 9½ in. \$10.00.

This book fills a long-felt need for information on the television production techniques, not only as they apply to large network-operated television stations but also as they pertain to the practices in small local stations.

The author visited 76 operating television stations from coast to coast, as well as two in Canada, and the practices in some of these stations are described. He also obtained material from many other television authorities, manufacturers and the television networks.

The book is well organized, easy to read, and is equally interesting to persons who have been engaged in television work, as well as those who are new to the field.

The complex problems of staff responsibility, camera handling, control-room

operation, and switching and production problems resulting from technical limitations are well covered.

The chapters relating to lenses, mirrors and prisms, special effects, graphic materials, illusions and projection equipment are especially valuable to production personnel. The treatment is nontechnical and is easy to understand since excellent illustrations are utilized to supplement the text.

The chapters on television scenery, make-up and lighting will be very useful to production and technical personnel. The chapters on audio and remote pickups provide good general information.

The reviewer believes that this book will be especially useful to all newcomers to television and a valuable reference source for those engaged in the art.—*R. A. Isberg*, Television Consultant, 2001 Barbara Dr., Palo Alto, Calif.

## New Products

Further information about these items can be obtained direct from the addresses given. As in the case of technical papers, the Society is not responsible for manufacturers' statements, and publication of these items does not constitute endorsement of the products.

VTR (video tape recording), a new system of recording television signals on magnetic tape, has been announced by Bing Crosby Enterprises, Inc., Los Angeles. The new system is designed to conserve tape velocity and permit 15-min running time from reels of reasonable size. One-half in. or  $\frac{3}{8}$ -in. tape may be used, and the tape speed is 100 ips in either case.

Ten tracks are used simultaneously for video information; an eleventh track records vertical and horizontal synchronizing signals; and a twelfth carries the sound channel.

For recording, horizontal sync from the incoming video signal is transformed into a pulse which in turn operates a polarity-reversing switch affecting the signal at the pulse rate. The signal, alternating at 169 kc, is then applied to a series of ten switch units in parallel, and the pulse meantime applied to a delay line containing nine equally spaced taps. During the pulse period each switch in turn samples the video signal and passes a burst of current to its associated recording head. At the end of this sequence, the polarity of the input video signal reverses and each recording head is excited in the reverse manner. An alternating signal is thus recorded on each

