Sound Committee Report

By Lloyd T. Goldsmith, Committee Chairman

IT HAS BEEN several years since the Sound Committee has reported to the Society on its activities and accomplishments. It has been active, however, on projects authorized by the Engineering Vice-President and the following is an account of its work to date.

A subcommittee under the chairmanship of R. T. Van Niman investigated the possible advantages of the blue-sensitive and lead sulfide types of phototubes for 35-mm theater and 16-mm projector use over the presently used red-sensitive phototubes. This is a continuing activity being carried on with manufacturers of color films; but at the present time, only the red-sensitive phototube is recommended as giving the best all-around performance with present day black-and-white and color sound tracks. Additional data now scheduled for collection may provide the basis for modifying this statement, however.

Our committee has cooperated with a subcommittee of the 16-Mm and 8-Mm Motion Picture Committee, which is working to establish electrical characteristics for 16-mm review-room reproducers.

We studied and approved proposals which lead to the standardization of 100-mil and 200-mil push-pull sound tracks used in recording original sound.

Considerable correlation has been carried on to reconcile the Society's proposed standards of flutter definition and measurement with the proposals of Dr. Kellogg's ASA Sound Committee Z-57. Agreement has now been reached and early ASA standardization will result. The original flutter proposals were formulated by the Sound Committee under the chairmanship of J. G. Frayne, who with R. Scoville, has actively followed through with the correlation.

Our committee aided in the preparation and final approval of the Society's 16-mm Sound Service Test Film Code SPSA, which has had wide sale and use in testing the performance of 16-mm sound projectors.

The proposed British standards for magnetic recording were reviewed and comment forwarded to the British Standards Institution.

It was brought to the attention of the committee that some recent screen installations in theaters resulted in excessive loss of volume and high-frequency response from the screen horns. The committee investigated, measured the loss of screen samples, and on finding it excessive, aided the manufacturer in modifying his fabric to reduce the sound loss to accepted values. As the War Standard Z52.44-1945 "Sound Transmission of Perforated Screens" had never been reviewed and processed as an American Standard, the committee circulated it to all known screen manufacturers for approval. Their recent loss data all met the War Standard, and, accordingly, the Sound Committee approved the War Standard with minor revisions, and the new proposal was pub-

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lished in the July, 1950, JOURNAL for a 90-day trial period leading to its eventual adoption as ASA Standard Z22.82.

The proposed American Standard for Acoustical Terminology developed by ASA Sectional Committee Z-24 on Acoustics was reviewed and suggested changes forwarded to that committee.

In May, 1948, a Subcommittee on Magnetic Recording was set up, with G. L. Dimmick as Chairman, and charged with the formulation of standard sound track dimensions and speeds of magnetic recording on 35-, 17½-, 16- and 8-mm motion picture film. With the help of several task forces assigned to specific aspects of the problem, the subcommittee prepared for the Sound Committee proposed standards which are now in the hands of the Standards Committee with the recommendation that they be published in the JOURNAL for six-month's trial and criticism. A progress report of the subcommittee was given at the 1949 Fall Convention.

The Magnetic Recording Subcommittee is about to prepare specifications for magnetic test films of the types that may be required by industry and sold by the Society. At the moment, an azimuth film, multifrequency film and buzz track appear to be most needed and will probably be made available first.

It is anticipated that problems associated with magnetic recording and reproduction will constitute the major part of the committee's work for the coming year with particular emphasis on standards, test films and television sound problems.

Theater Television Committee Report

By D. E. Hyndman, Committee Chairman

DURING 1948 AND 1949, the work of the Society's Theater Television Committee was devoted to the consideration of all engineering phases of the use of television in motion picture theaters. It reviewed the design, construction and operation of theater television equipment, from the standpoint of alterations that might be necessary within a theater, power supplies, viewing conditions, screen brightness, program distribution facilities and the like.

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In June, 1949, the Federal Communications Commission requested the Society along with Paramount Pictures, Inc., and Twentieth Century-Fox Film Corp. to file a statement concerning the allocation of frequency bands for a theater television service. This request brought to an end the more or less broad general consideration that was being given to all phases of this work and forced the committee to concentrate on a statement which would outline in specific terms what the industry needed in the way of radio frequencies to establish a nation-wide theater television serv-