

Section Meetings

Central

The October 22, 1948, meeting of the Central Section of the SMPE was held in the Auditorium of the Engineering Building in Chicago, in joint session with the Chicago Section of the Institute of Radio Engineers.

Kenneth Jarvis of the IRE called the meeting to order and introduced R. T. Van Niman who, in turn, introduced the first speaker, Ernest F. Zatorsky, director of sound recording, The Jam Handy Organization, Detroit.

His paper titled "Microphone Placement Techniques as Applied to Motion Picture Sound Recording" outlined problems involved in securing good quality sound pickup without having the microphone appear in the picture. He advocates use of one microphone directly above the camera line and in front of the subject.

The next paper was "Synchrolite for Television Film Projectors" by L. C. Downes, Television Engineering Section, General Electric Company, Syracuse. This paper described a pulse light source for a standard projector operating at 24 frames per second with the shutter removed, the pulse rate being 30 per second to synchronize with tube scanning. The lamp is Krypton filled. The flash points are a tungston alloy and arc at about 70 to 80 amperes. Operation of the unit consumes 400 to 500 watts, and the life of the lamp is rated at 50 hours. The temperature at the film gate is very low, and the light delivered to the television pickup is 50 foot-candles. The pulse circuits were described in detail, and open discussion followed this presentation.

The November 12, 1948, meeting of the Central Section was called to order by R. T. Van Niman in the rooms of the Western Society of Engineers. About 110 members and guests were present. Short reports on the Washington convention and the election of national officers were given.

"Carbon-Arc Projection," a technicolor film produced by National Carbon Company was presented first. Preliminary comments were given by C. E. Heppberger of this Company. The film was projected with a 16-mm carbon-arc machine, and problems in the making of the film and techniques used were explained.

"A Discussion of High-Quality Sound Reproduction" was given by John K. Hilliard, of the Altec Lansing Corporation.

Mr. Hilliard outlined the requirements for high-quality sound reproduction from both the objective and subjective points of view, pointing out that an overall flat system frequency response, the supposed ideal from the objective point of view, does not necessarily produce a satisfactory illusion of reality in the reproduced sound. He discussed many of the factors which are believed to be responsible for this situation such as level differences between original and reproduction, various types of distortions introduced acoustically, electrically, mechanically, or photographically, and psychological conditioning of listeners. The considerations upon which the motion picture industry's optimum electrical-response curves for theater reproducing equipment are based were outlined, and Mr. Hilliard stated that similar curves for 16-mm reproducing equipment are being plotted.

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Acoustical-response measurements on typical good-quality theater equipment were presented, and dynamic power-level curves were shown which indicate that all components of sound systems must be capable of handling with low-distortion transients of extended frequency range and peak powers many times the so-called "normal" system ratings if the reproduced sound is to more than superficially resemble the original.

Mr. Hilliard's formal presentation was followed by a discussion period of almost equal length participated in by many members of the Chicago audio group who attended the meeting. Spirited arguments developed as to the precise meaning of some of the terms used in discussing "high-quality" sound reproduction, and many dissenting opinions were expressed regarding such conclusions as have so far been drawn in the audio field. The one point of general agreement appeared to be that only a beginning has been made in reproducing sound, and that a great deal of further research and development is needed, particularly with respect to the psychological aspects of the general problem.

Pacific Coast

An audience of approximately 150 members, admitted by membership card only, filled the Western Electric Review Room to witness a program consisting of a symposium of papers on "The Problem of Sound Reproduction on 16-Mm Kodachrome," at the October 12, 1948, meeting of the Pacific Coast Section. R. G. Hufford of the Eastman Kodak Company presented a paper on the "Sensitometric Characteristics of the Kodachromé Sound Track," which was followed by a short sound demonstration film. Robert V. McKie of the RCA Victor Division gave a short talk on the establishment and maintenance of commercial processing tolerances for making variable-area Kodachrome sound track. J. G. Frayne of the Electrical Research Products Division of Western Electric outlines the methods of making variable-density sound track on Kodachrome and introduced a new system of "electrical printing" whereby the sound track is re-recorded onto each Kodachrome release print. Dr. Frayne gave a demonstration of the quality obtained by this latter method.

The November 9, 1948, meeting of the West Coast Section was held at the recently completed broadcast studio of Radio Station KHJ and the Mutual-Don Lee network. Approximately 350 members and their wives attended this very interesting and informative evening's entertainment and tour through the studio.

The studio management arranged to permit the audience to see a live-talent television broadcast as the opening phase of the evening's program. A portion of the audience saw the program reproduced on a large-screen television receiver in an adjacent auditorium in the studio. Following this television activity, W. Carruthers, chief engineer of Station KHJ, and F. L. Hopper of Western Electric, discussed some of the outstanding architectural, acoustical, and electrical features of this studio, and Harry Lubeke, director of television at Station KHJ, discussed some of the interesting aspects of the television experiences of this organization.

The remainder of the evening was devoted to a conducted tour in small groups through the entire studio, with engineering experts available for questions from the audience concerning the engineering features of the equipment in the studio.