

Reports of the Engineering and Standardization Committees Activities

The brief reports published here are intended to reflect the large volume of work being carried on through the SMPTE Engineering Dept. and its committees. For more detailed information on the activities or the individual projects, one should contact Alex E. Alden, Manager of Engineering Services of the SMPTE, at headquarters. The Society welcomes participation by specialists from industry in the work of its Engineering Committees and all those who may be interested in exploring the possibility of active membership on any of the committees should contact A. E. Alden or Roland J. Zavada, Engineering Vice-President of the Society. While the Society is in a position to provide the mechanics for the development of National Standards, it relies heavily on the input made available from industry through its engineering committee members.

Standards Committee

Mr. Roland J. Zavada, the Engineering Vice-President, discussed the reorganization of the engineering committees with the members of the Standards Committee, an emphasized the expanded role that the committee will assume under the new scheme. In addition to the established function of reviewing new and revised proposals and recommendations, the group will serve in an advisory capacity to the Engineering Vice-President.

Mr. Zavada reported on the recent activities of the JCIC (Joint Committee for Inter-Society Coordination), which was called at the request of the SMPTE to review existing projects of Ancillary Television Signals, Digital Television, Television Sound, and additional new projects concerning Digital Television, Digital Audio Recording and High Definition Television Systems. It was agreed that the SMPTE should undertake the study of these new questions which will be assigned to Study Groups under the SMPTE New Technology Committee.

Two International Meetings were held during this year: *ISO/TC 36* (International Organization for Standardization — Technical Committee 36 on Cinematography) was held in Paris, France during May 1976. *IEC/TC 60* (International Electrotechnical Commission—Technical Committee 60 on Recording) was held in Ottawa, Canada during August 1976.

The activities of these meetings as well as the meeting of Subcommittee SC 60C on Educational Equipment was reported on by several members, who served as Delegates to the international meetings.

Since the role of the Standards Committee has been expanded, the question of holding more than one meeting a year was discussed. It was decided that it was too premature to schedule at this time, and therefore, the members would be contacted in the Spring of next year to determine whether a meeting is necessary.

18 October 1976

CHARLES E. ANDERSON
Chairman

Committee on Laboratory Services Technology and Applications

A heavily attended session of the committee opened with the introduction of those present, and a review of the committee reorganization by the Manager of Engineering Services, Mr. A. E. Alden.

The Working Group is conducting reviews of PH22.83, Specifications for Location and Spacing of Edge Numbers on 16-mm Motion-Picture Film, and PH22.148, Specifications for Film Image Area Used for Review Room Viewing of 35-mm and

16-mm Motion-Picture Prints Intended for Television Transmission, has been reaffirmed.

Working Groups chaired by Messrs. Discher, Scobey and Reichard will continue to review RP 25, Sound and Picture Synchronization on Motion-Picture Film Relative to the Universal Leader for Magnetic and Photographic Tracks, and RP 23, Reinforcement of 70mm Positive Splices, as well as documentation of the storage of film and magnetic tape respectively.

The work on an Engineering Recommendation for rawstock container edge labelling has been completed by the committee and forwarded to the Standards Committee with the prospect of an early conclusion.

Mr. Bruno reported that the investigation relating to the laboratory exchange of color materials has been concluded with the recommendation that the committee work be discontinued because the currently available LAD type wedges and other materials developed by the individual laboratories are apparently meeting current needs. The committee agreed and discharged the Working Group with a commendation of its efforts.

Mr. F. J. Scobey reported on the acceptance of ANSI PH22.55, on the Universal Leader and the agreement by the ISO on the basic contents such as start marks, cue marks, and so forth.

Mr. D. Carter reported on the study relative to a need for a document relating to the practice of evaluating prints designed for comparison of various films on laboratory prints, and processing of projection equipment. The Working Group was expanded to include additional personnel and asked to continue its present activity.

The next meeting of the committee will be held concurrently with the 119th SMPTE Technical Conference in Los Angeles, California during October 1977.

18 October 1976

J. HALL
Chairman

Committee on Educational, Industrial and Consumer Film Technology and Application

Mr. Roland J. Zavada, the Engineering Vice-President, explained in detail the new organization of the Engineering Committees of the Society.

Subsequent to discussing the work currently being studied by the committee, it was decided that a synopsis of the various systems of super 8 projector cassettes will be circulated to the members of the committee for consideration as a committee report.

Mr. H. Farmer suggested that the preparation of the Non-Theatrical Applications Report be discontinued as a committee report, but recognizing the importance of the material, offered to contact specialists to develop individual sections which could be published in the *SMPTE Journal*, either singularly or as a composite report. The committee concurred with the recommendation, and he agreed to keep the committee advised of the progress.

Mr. D. McConnell reported on the ISO/TC 36 meeting (International Standards Organization, Technical Committee 36 on Cinematography), which was held in Paris, France during May 1976, noting the increasing importance of ISO standards. It was not possible to develop ISO standards for super 8 cassettes, but work is progressing for other projection hardware.

The committee plans to hold their next meeting in Los Angeles, California concurrently with the SMPTE 119th Technical Conference in October 1977. In the interim period, the committee will

carry on its activities through Working Groups under the supervision of the Steering Committees.

19 October 1976

A. C. SCHIEMAN
Chairman

Committee on Theatrical Projection Technology and Application

A heavily attended session of the committee, which included approximately three-fourths of the overall committee and representatives from other countries, opened with the introduction of those present, and the review of the committee reorganization by the Manager of Engineering Services, Mr. A. E. Alden.

The ambitious agenda did not mention the progress of the past year which included several major revisions of standards plus new items and consolidations of other standards, which in turn, resulted in five new standards (PH22.192 through PH22.196).

Major efforts in the past included documents on reels and spindles, revisions or consolidations of documents such as screen luminance, image areas, and projector film usage standards plus a complete revision of the document on theater lenses.

Old topics have now been reduced to three items — conference guidelines, 35-mm sprockets, and measurement of screen gain, and there are immediate plans for each.

The five-year review requirements included two Recommended Practices which have been reaffirmed — RP 12, Screen Luminance for Drive-in Theaters, and RP 33, Specifications for 35-mm Subjective Picture Test Film for Theaters and Review Rooms.

New Projects discussed included (a) several new performance areas, (b) continued effort in the film damage study, and (c) test film activity which includes a new 16-mm test pattern plus the consolidation of two different 35-mm jump and weave test films.

Performance topics included (a) film tension, (b) color shift lenses, (c) total projector light output, (d) screen reflectance, (e) theater design guidelines, (f) screen image jump and weave limits, and (g) safe handling factors in the study of film damage.

The next meeting of the committee will be held concurrently with the 119th SMPTE Technical Conference in Los Angeles, California during October 1977.

19 October 1976

G. M. BERGGREN
Chairman

Committee on Film Technology

The reorganization of engineering committees was reviewed by Mr. A. E. Alden, Manager of Engineering Services, and Mr. R. J. Zavada, Vice-President of Engineering, for those present.

Mr. Alden reported on the status of an ISO draft standard for 16-mm type W camera image, commonly known as super 16-mm, and copies of the draft will be circulated to the members in the near future. Mr. Zavada cautioned about a committee sanctioning a generic term for the format often referred to as "super 16" when selecting a title, pointing out that the term chosen should not be confused with super 8-mm systems.

Mr. Zavada reported on the ISO/TC 36 meeting (International Organization for Standardization, Technical Committee 36 on Cinematography), which was held in Paris, France during May 1976. He gave examples of the large amount of effort that is required to reach a logical agreement for the adjustment of dimensions to conform to the international standards.

Messrs. J. Hester and L. R. Thomas agreed to assume the responsibility to prepare or coordinate a report showing historically how and why film dimensions are derived. It is expected that this report will be of considerable value to those involved in the generation of, or modification to, film dimension standards.

The next meeting of the committee will be held in Los Angeles,

California during the 119th SMPTE Technical Conference in October 1977.

20 October 1976

C. R. DUPREE
Chairman

Committee on New Technology

Mr. Zavada, the Engineering Vice-President, assumed the responsibility of Chairman Pro Tem for the meeting, noting that Mr. Frederick Remley, the Chairman, regrettably was unable to attend the conference and this committee meeting.

An explanation was given on the reorganization of the Society's engineering efforts, noting especially that the Committee on New Technology was conceptually different in the reorganized program. It is anticipated that this committee will concern itself with developments in the technologies of other engineering committees that would benefit from the concentrated efforts of a committee dedicated only to advanced technology and needs. Therefore, this committee will not become involved in the reaffirmation or revision of existing standards, but will concentrate on support of the engineering activities by studying needs and possible standardization requirements of the new technology projects directed to it.

The Engineering Vice-President, with the concurrence of the Standards Committee, has assigned four major projects to the New Technology Committee. They are as follows:

(1) Study Group on Digital Television Technology: this group will continue on the same level as it has been functioning for the past year and a half under the Chairmanship of Mr. C. Ginsburg.

a. The group has identified the need for a Working Group directed toward standardization of in-out ports for digital interface and for an all-digital studio. The chairman and members are to be selected.

b. Another study group will be set up to support the digital efforts as they relate to the propagation of audio signals used in the production and processing of television and motion-picture programming.

(2) A study group will be set up to investigate the needs for the capability of existing equipment and/or possible format variations of wide-band or high-definition television systems. This study group is in the process of being formed and will be chaired by Mr. Donald Fink.

(3) Motion-picture time codes that would interface with the electronic time code on videotape has been the subject for study intermittently during the past several years. The work of the past committee, together with new efforts, will be conducted by a Working Group under the New Technology Committee which will appraise existing 16-mm systems in light of full professional motion-picture film applications at potential interface with electronic transfer. The selection of a chairman and committee are pending.

(4) The study group on videodisc technology, previously functioning under the Video Recording Technology Engineering Committee, will be transferred to the New Technology Committee and restructured to encompass potential broadcast applications of videodisc as well as an understanding of the consumer applications and technology of videodiscs. A new chairman and members are in the process of being selected.

The time and place of the next meeting is set for 27 January 1977 in San Francisco, California at 3:00 P.M., just prior to the SMPTE Winter Television Conference.

1 November 1976

R. J. ZAVADA
Chairman Pro Tem

Committee on Audio Recording and Reproduction

Subsequent to a brief compendium on the new organization of the engineering committees of the Society by the Manager of

Engineering Services, Mr. A. E. Alden, those present introduced themselves, and the chairman summarized the subjects under the committee, noting the heavy workload that is to be undertaken during the next 12 months.

It was the general consensus of those present that a Recommended Practice on photographic stereo sound records on 35-mm motion-picture negatives and prints will be circulated to the committee for balloting, and that an Engineering Recommendation will be circulated to the committee on photographic stereo sound record on 16-mm motion-picture negatives and prints.

Dr. F. J. Kolb reported on the ISO/TC 36 meeting (International Organization for Standardization, Technical Committee 36 on Cinematography), specifically on Preparatory Working Group-3 (Sound Recording and Reproduction), held in Paris, France during May 1976. Mr. Lumkin, Chairman of Preparatory Working Group-3, further reported on informal discussions held in Moscow, USSR during October 1976.

Recommendation for an azimuth test film and the support for Mr. Zavada's representation to the NAB's (National Association of Broadcasters) Committee on Commercial Loudness were referred to study groups, and the signal-to-noise project will continue to be studied by a working group.

The next meeting of the committee will be held concurrently with the SMPTE 119th Technical Conference during October 1977 in Los Angeles, California.

1 November 1976

R. C. LOVICK
Chairman

Committee on Television Technology

After a brief introduction of those present, the Manager of Engineering Services, Mr. A. E. Alden, noted that an audio recording of all the engineering committees would be available upon request for a nominal fee, and these recordings would be stored at headquarters for a period of three years.

As in other engineering committees held during the week, the Vice-President of Engineering, Mr. R. J. Zavada, explained the reorganization of engineering committees.

Among the major items discussed was the need to find a supplier(s) for television test slides and gray scales. In addition, it was recommended that a new color television reference film be produced for both 35mm and 16mm.

Work is being done on the standardization of television lens mounts, and the investigation of standards for high-definition television will be undertaken as well as standardization for digital television by the "New Technology Committee."

The next meeting of the Steering Committee will in all probability be held during March 1977 in Washington, D.C. during the NAB Conference. The members will be notified by mail as to the exact date. The full committee will meet concurrently with the 119th SMPTE Technical Conference during October 1977 in Los Angeles, California.

21 October 1976

A. H. CHISMAR
Chairman

Standards & Recommended Practices

Approved American National Standards

On 10 May 1976, the American National Standards Institute approved four standards: PH22.155-1976, Specifications for Projector Usage of 8-mm Type S (Super 8) Motion-Picture Film (revision of PH22.155-1967 (R1973)); PH22.156-1976, Specifications for Camera Usage of 8-mm Type S (Super 8) Motion-Picture Film (revision of PH22.156-1968 (R1973)); PH22.172.2-1976, Dimensions of Tape Splices on 8-mm Motion-Picture Film Perforated 8-mm Type S (Super 8), Projection Type (revision of PH22.172.2-1969); and PH22.176-1976, Dimensions of Magnetic Striping of 16-mm Motion-Picture Film Perforated 8-mm Type S (Super 8), 2R-1667 (1-3) (revision of PH22.176-1969).

Although the standards are primarily editorial revisions of earlier issues, it is suggested that those concerned with the subjects covered review these issues carefully.

Inasmuch as compliance with American National Standards is purely voluntary these standards will become truly effective when broad publicity is given to their existence. ANSI and SMPTE would appreciate any personal influence to promote the use of these standards where such action is appropriate. Copies of these standards may be obtained for a nominal fee from the American National Standards Institute, 1430 Broadway, New York, NY 10018.

Draft American National Standards

Two Draft American National Standards are published here for a trial period and public review: PH22.159.1, Specifications

for 8-mm Type S (Super 8) Motion-Picture Film Camera Cartridge, Cartridge-Camera Fit and Take-Up Core Drive (revision and consolidation of PH22.159.1-1968 and PH22.159.4-1968); PH22.196, Screen Luminance and Viewing Conditions for Indoor Theater Projection of Motion-Picture Prints (revision and consolidation of PH22.100-1975, PH22.124-1970 and PH22.133-1963).

These drafts do not reflect any technical changes, but have been editorially modified to facilitate their use. However, they should be reviewed carefully by all concerned.

Comments should be addressed to Alex E. Alden, Manager of Engineering Services, at Society Headquarters before 1 February 1977. The proposals have been submitted to American National Standards Committee PH22. Consequently, all comments received through *Journal* publication will be reviewed prior to conclusion of action by that committee.

Approved International Standard

The International Organization for Standardization (ISO) recently approved a new International Standard, the technical content of which is published here for information.

ISO 3647-1976, Cinematography — Spindles for 16-mm Motion-Picture Camera Spools and Projector Reels — Dimensions, is in complete agreement with USA practices although there is no comparable American National Standard.

Complete copies of International Standards are available from the American National Standards Institute, 1430 Broadway, New York, NY 10018. — Alex E. Alden, *Manager of Engineering Services*.