

Technical Report of the Semiannual Meeting of the Association of Cinema Laboratories

From a report read on November 1, 1965, at the SMPTE Technical Conference in Montreal by William D. Hedden for the Association of Cinema Laboratories, Inc., 1925 K St., N.W., Room 402, Washington, D.C. 20006.

THE ASSOCIATION OF Cinema Laboratories recognizes a close relationship to certain interests of the Society of Motion Picture and Television Engineers. Although the topics of concern to ACL lie generally in the field of business and operating areas of the motion-picture laboratory, they are often but the extension of engineering practices into commercial operating applications in the laboratory. It has been recognized that many laboratory problems hold joint interest between the two organizations, as in some cases it is virtually impossible to define the area where engineering gives way to production operation — if it ever does!

On Saturday, October 30, 1965, the ACL held a technical session at which members discussed problems that arise in laboratory operations. Because many items discussed were of a direct technical nature, it has seemed reasonable to present a résumé to SMPTE members. Four areas were discussed:

- (1) motion-picture printing problems,
- (2) motion-picture processing problems,
- (3) 8mm developments, and
- (4) customer relations.

Topic leaders were Frank McGeary, MPL-Memphis; Burton Smith, Cine Chrome Laboratories, Palo Alto, Calif.; Robert A. Colburn, Geo. W. Colburn Laboratories, Chicago; and Byron Roudabush, Byron Motion Pictures, Washington, D.C. They led open discussion successively in the areas as noted above.

In printing problems, the most provocative item was the use of the relatively new 16mm Eastman Kodak, Type 7387, color reversal print film. Many laboratories reported considerable problems with this film. The problems related generally to unnaturally warm flesh tone reproduction, higher contrast, difficulty in maintaining printing uniformity and printer stability, timing problems, and others. There was also general agreement of improvement in sound quality with this film as compared to the previous Type 5269; however problems of track density printing uniformity were mentioned. The laboratories express great hope that these problems which seem to be shared by all laboratories will soon be reduced greatly by film manufacturing improvements. Other printing problems relating specifically to Bell & Howell Model C printers were discussed. These generally were maintenance problems. These printers are in use in many laboratories.

In the area of film processing, great concern was expressed about inter-lab Ektachrome processing quality. As numerous laboratories are now installing original Ektachrome processing equipment, the possibility was discussed of laboratories' having their own — and unrelated — quality standards, and their own conceptions of allowable process variability. Concern was expressed that future printing problems probably might result with edited preprint Ektachrome originals processed at several laboratories with widely varying quality aims. The concern resulted in the passage of a resolution calling for the establishment of a committee to initiate action toward the

consideration of the adoption of an inter-lab Ektachrome quality survey. ACL President Arthur Miller announced that he would appoint a committee to study this problem. Other processing items discussed related to materials of construction; and to various techniques for uniformity control of processing sensitometric test strips.

The 8mm discussion was lively and provocative. The first question was: what has been the impact of Super 8 in 8mm laboratory operation? Various answers were given. Some of this discussion will continue in SMPTE engineering committees. In general, most laboratories report the necessity of physically converting much of their 8mm equipment, such as printing sprockets, processing sprockets, slitters, rewinds, and allied equipment to handle the Super 8. The laboratories printing Super 8 report considerably more printing for silent than for sound projectors. Problems relating to the four-row 35mm format were also mentioned.

The status of 8mm optical sound was discussed at length. Many laboratories again expressed an economic preference for optical rather than magnetic sound, although magnetic sound prints on the existing format are being made successfully. A press release by the Eastman Kodak Co. was read announcing that Mr. John Maurer was now working with Eastman on the development of an optical sound system for Super 8 films. Mention was also made of recent demonstrations of a Japanese Super 8 optical sound projector.

A discussion of dye tracks — and applied tracks — resulted in the following resolution voted unanimously by the Association: "Resolved, that the Executive Secretary of the Association of Cinema Laboratories contact the various manufacturers of 8mm projectors and those connected with the development of 8mm optical sound equipment advising them of the unanimous feeling of the Association toward the great desirability of an 8mm dye soundtrack." The laboratories believe that at this stage of equipment development it is imperative for simplified laboratory processing operations that suitable 8mm optical sound equipment effort be expended toward the use of dye tracks.

8mm laboratory problems relating to cartridge-loaded films for use in projectors were discussed. The lack of standardization of sound advancement was reported. Three different magazines are in common use — each with a different advance — and two from the same manufacturer. Laboratory problems of handling the confusing situation were mentioned. Also, the lubrication treatment of films for cartridge projectors was brought up. Several laboratories reported that a number of different lubrication treatments were successfully used.

In the customer relation section, many laboratory customer-relations items were discussed:

For straight cuts, which are preferred, — checkerboarded or "zero cut" techniques;

Timing problems and techniques;

The economic use of short ends;

TV spot problems;

The use of the new SMPTE Universal Leader and other similar items.

It is hoped that this report on the subjects discussed at this Technical Session of the Association of Cinema Laboratories has been of interest at this Laboratory Papers Session of the SMPTE.