

to be an accurate method of correlating time among several independent cameras. It will produce a time resolution of ± 1 msec and give a ground correlation or "event" time. It is simpler, lighter and more economical than other systems used to this date.

The Douglas Aircraft Co. has applied for a patent on this device, and the Traid Corp. is currently manufacturing it under a license agreement.

Discussion

Anon (Edwards Air Force Base): In the timing system where you had lamps oriented in a circular bank that reflected off an annular mirror and thus back through the objective lens, what arrangement was made for determining time when the shutter was closed?

Mr. Blake: This circular bank of neon lamps is photographed simultaneously with each field picture. The shutter merely samples time at the same instance as the field picture exposure. By referring to a glossary of the lamp flashing pattern, the time of picture exposure can be determined.

Anon (EAFB): What happens to time in between pictures?

Mr. Blake: The lamp time clock being continuous, it is only necessary to sample it photographically at intervals.

Mark MacIntosh (Traid Corp.): In referring to the diagram showing the one-fifth segments of an exposure cycle, I would like to know whether at 100 frames/sec these segments become 2 msec long?

Mr. Blake: Yes, they would. The accuracy of the Duplex Code has the resolution of at least one-fifth the reciprocal of the frame per second. At 200 frames/sec this becomes 1 msec, and at 16 frames/sec, one eightieth of a second.

motion-picture standards

Proposed American Standard PH22.100

A Proposed American Standard, Screen Brightness of 16mm Laboratory Review Rooms, PH22.100, is published on this page for the three-month period of trial and criticism. Comments should be sent to Henry Kogel, Staff Engineer, prior to April 15, 1955. If no adverse comments are received, this proposed standard will then be submitted to the ASA Sectional Committee on Cinematography, PH22, for further processing as an American Standard.

Some four years ago, the question was raised of standardizing the screen brightness of screens used in film processing laboratories when reviewing the quality of 16mm prints prior to shipping. Since then, surveys were conducted on existing field conditions and several different standards were drafted and voted upon by letter ballot by the Laboratory Practice and Screen Brightness Committees, but without obtaining the necessary unanimity of opinion. Two opposing views crystallized early: the majority held forth for and demonstrated the technical desirability of a screen brightness range of 9-14 ft L (the 35mm standard) whereas the minority proposed on a range of 5-10 ft L to permit certain limited projection conditions to fall within the range of the standard. The present proposal was an acceptable compromise to both groups.

Proposed American Standard

Screen Brightness of 16mm Laboratory Review Rooms


 Reg. U. S. Pat. Off.
 PH22.100

1. Scope

1.1 This standard specifies the brightness of screens used in the projection of 16mm motion-picture prints in laboratory review rooms.

2. Screen Brightness

2.1 The brightness at the center of a screen for viewing 16mm motion pictures in laboratory review rooms shall be 10 ± 2 foot-Lamberts when the projector is running with no film in the gate.

NOT APPROVED

This draft was approved, almost unanimously, by the Screen Brightness, Laboratory Practice and Standards Committees with the exception of one negative vote from a member of the Laboratory Practice Committee.—H.K.

Three new American Standards of interest to SMPTE members are now available from the American Standards Association at 70 E. 45 St., New York 17:

(1) American Standard Method for the Free-Field Secondary Calibration of Microphones, Z24.11-1954.

(2) Method for Indicating the Stability of the Images of Processed, Black-and-White Films, Plates and Papers, PH4.12-1954 (Revision of Z38.8.17-1948).

(3) Methods and Criteria for Determining the Chemical Resistivity and Photographic Inertness of Constructional Materials for Processing Equipment, PH4.13-1954.