

bulk of the liquid in the tank, this temperature interface will refract the light causing a mottled streaking in the print.

With a subtractive illumination system, the temperature difference has to be substantial, 3°C or more, to have much of a detrimental effect. With additive color illumination such as the Bell & Howell single lamp or Technicolor 3-lamp systems, use is made of dichroic mirrors, and when light passes through these interference coatings, it becomes partially polarized. This polarized light shows up liquid striae caused by temperature differences to a much greater extent than non-polarized

light. Here, 1°C can be significant. This problem can be made much less critical, to the point of essentially eliminating it, by keeping the total liquid optical path down to 6 mm or less. Shortening the liquid path also reduces the chance of suspended dirt particles getting into the light beam.

#### Acknowledgment

The author wishes to acknowledge the contribution to this study by three former members of the technical staff of Technicolor, Alan Gundelfinger, Henry Imus and Don Nicholson.

#### References

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2. Henry O. Imus and Joseph W. Schmit, "Projection Printer," U.S. Pat. No. 2,995,977.
3. R. H. DeMoulin, P. A. Ripson, Jr., and S. L. Scudder, "Application of a Liquid Layer on Negative Films to Eliminate Surface Defects in Optical Printing," *J. SMPTE*, 68: 415-416, June 1959.
4. Howard F. Ott, "Liquid Gate for Optical Printing," *J. SMPTE*, 79: 333-337, April 1970.
5. Harold A. Mayer, "Submerged Negative Heads for Printing Within a Liquid," *J. SMPTE*, 79: 535-536, June 1970.

## Notice of Annual Meeting of Voting Members To be Held 17 October 1977

#### To Voting Members of SMPTE:

NOTICE IS HEREBY GIVEN that the Annual Meeting of the Society of Motion Picture and Television Engineers, Inc., will be held at 2 p.m., local time, 17 October 1977 at the Century Plaza Hotel, Los Angeles, California.

The purpose of this meeting will be to vote on proposed amendments to the Society's Bylaws. These amendments have been processed by the Revisions Committee, Richard S. O'Brien, Chairman, and approved by the Board of Governors at its meetings of 17 October 1976 and 27 January 1977.

#### 1. REGIONAL REPRESENTATION

The purpose of the proposed amendment is to minimize the effect of small changes in regional membership on the number of governors by which a region may be represented.

#### Bylaws Article III, Section 2, Subsec. B. Representation

*Amend to read:* The Regions of the United States and Canada shall be represented on the basis of one Governor for each 500 members, or fraction thereof, of any grade, elected by the voting membership residing in their respective Region. Membership in the Regions shall be determined on the basis of an annual membership audit as of 31 December of each year.

To increase the number of Governors, the Regional membership must exceed the nearest multiple of 500 by at least 25 members for two consecutive years. Conversely, the number of Governors representing a Region will not be reduced unless the membership falls at least 25 members below the determining multiple of 500 for two consecutive years.

Members residing in countries other than the United States of America or Canada may vote for any two nominees for Governor, regardless of Region, who they feel will be best able to serve their interests.

#### 2. STAGGERING TERMS OF OFFICE OF FINANCIAL VICE-PRESIDENT AND TREASURER.

For the purpose of improving continuity in the conduct of the Society's financial affairs, the proposed amendment would cause the terms of the Financial Vice-President and Treasurer to start in different years instead of running concurrently.

#### Bylaws Article III, Section 1. Number and Term of Office

*Amend to read:* The Board of Governors shall consist of: (1) the elected officers; (2) the Past-President of the Society; (3) individuals elected by the membership as hereinafter prescribed; (4) not more than five individuals elected by the Board of Governors for a term of one year when in the opinion of the Board such additional members will more adequately represent the interest and activities of the Society's membership.

All members of the Board of Governors shall be members of the Society in either Honorary, Life Fellow, Fellow, Life Member or Active grades.

All Officers and Governors elected by the voting members of the Society shall serve for a term of two years (or until their successors have been duly elected), defined as follows:

January 1 of each odd-numbered year shall begin a term of office for the President, Executive Vice-President, Past-President, Editorial Vice-President, Conference Vice-President, Secretary, Treasurer, and approximately one half of the Governors as specified in Article III, Sec. 2, Subsec. B.

January 1 of each even-numbered year shall begin a term of office for the Engineering Vice-President, Financial Vice-President, Sections Vice-President, Vice-President for Educational Affairs, Vice-President for Photo-instrumentation Affairs, Vice-President for Motion Picture Affairs, Vice-President for Photo-science Affairs, Vice-President for Television Affairs, and the remaining approximate one-half of the Governors as specified in Article III, Sec. 2, Subsec. B.

For the purpose of voting on these proposed amendments to the Society's Bylaws, the Board of Governors has authorized me to solicit proxies pursuant to Article II, Section 5 of the Bylaws in order to ensure a quorum at this Annual Meeting.

After consideration of the proposed amendments please mark, sign and return your proxy. If you attend this Annual meeting in person, your proxy will be returned to you upon request and you may then vote in person if you so desire.

By direction of the Board of Governors.

WILLIAM D. HEDDEN  
President

22 July 1977