

16mm Professional Film — A Proposal

When a professional projector, such as that suggested by John A. Maurer in the February 1957 *Journal*, is available, I believe it should use a new professional 16mm film. This new film should be of such size and shape that it would not be used by the many nonprofessionals who habitually mistreat film.

Such a new film could look like that shown in Fig. 1 and add only 0.129 in. to the width of present double-perforated film.

With this format, the film could carry two soundtracks; in fact, with the discovery of the transparency of magnetic coatings, the new film could carry two magnetic and two optical tracks in the same space, one of each above the other. The added width of stock outside of the perforations would increase the strength of the film. Each magnetic stripe would act as a balance stripe to the other.

As surely as 16mm film took over many 35mm film formats, so will wide screen eventually come to 16mm. Having been intensely interested in wide-screen systems, I have been exploring ways to further a "growing up of 16mm." For wide-screen ratios, the problem is most flexible, in that any ratio desired may be adopted, standardized, or experimented with. For instance let us give our film a wide-frame line to start with; it will do no harm (Fig. 2).

Dimension A (height) remains the same for all wide-screen aspect ratios. I, personally, prefer 2 : 1 ratio like Todd-AO so the frame would look like Fig. 3.

To change the aspect ratio all one has to do is change dimension B (width). This system can utilize present pulldown mechanisms in both camera and projector without alteration, except for the addition of a tooth on the other side, which is for the better. Most camera and projector sprockets, idlers, and gates can be modified easily for the new film width.

And, not to ignore the application of the VistaVision principle to 16mm wide screen, it so happens that it works out so easily. Three 16mm frames in a horizontal manner work out to 2 : 1 nicely. Should other aspect ratios be more desirable, one has only to change the width and height of the aperture (Fig. 4).

Further thoughts on soundtracks which the new film size offers are: two optical 100mm tracks; two magnetic 100mm tracks; four magnetic 50mm tracks; two optical and two magnetic tracks, one over the other; two optical 100mm and four magnetic 50mm tracks. So multitrack sound could come to 16mm. Present 16mm subjects could be printed onto the new size of stock, the same as 65mm Todd-AO is printed onto 70mm film for release purpose.

October 29, 1957

R. REES LUMLEY
215 Harding Pl.
Syracuse 5, N.Y.

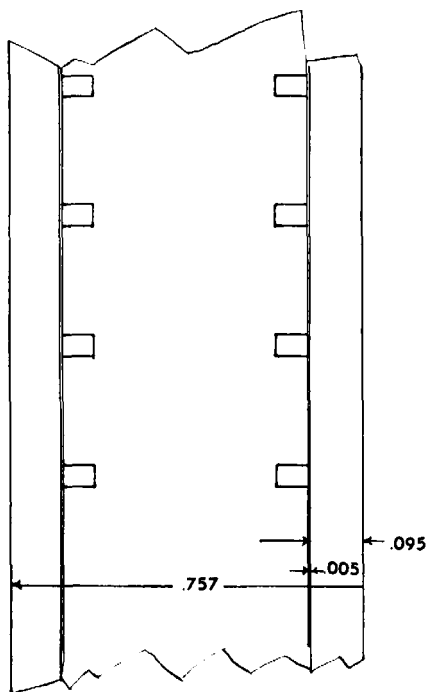


Figure 1

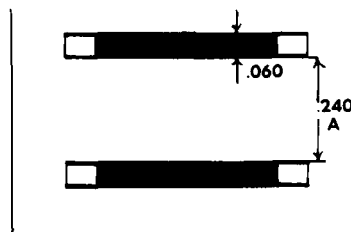


Figure 2

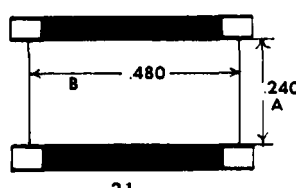


Figure 3

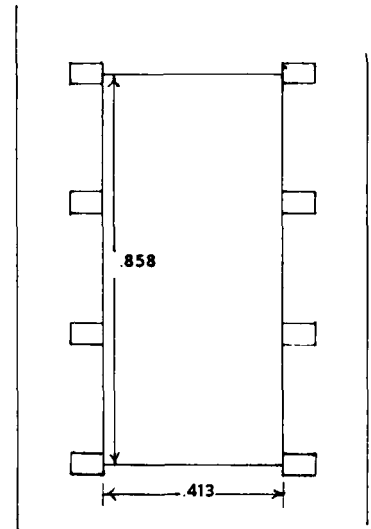


Figure 4