



Michael Dolan

In this column, we provide interesting historical briefs from the Journal articles of days past. The purpose of this column is primarily entertainment, but we hope it will also stimulate your thinking and reflection on the Society's history, how far we have come in the industry, and (sometimes) how some things never change. This column has been sponsored by Television Broadcast Technology, Inc., since March 2001: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7257346>.

25 Years Ago in the Journal

The June 1993 *Journal* published in “European HDTV Operations (1250/50 Production/HDMAC Broadcast) in the Winter and Summer Olympic Games” by M. Oudin: “In 1992, for the last time, the Winter and Summer Olympic Games were held during the same year. Also in 1992, the Winter and Summer Olympic Games both took place in European cities: Albertville, France, and Barcelona, Spain. The year 1992 was a key one for Europe—the year of European unity. It was also in Europe, in Seville, Spain, that the world exhibition, EXPO ‘92, was held the same year: The year also enabled Europe to organize, both for the Winter Games and for the Summer Games, the largest-scale broadcast of high-definition television ever undertaken during such events... The Objectives: Broadcast of 12–15 hrs/day of a high-definition program covering all of Europe; the organization of reception centers in the main European cities to allow the general public to have access to and appreciate the quality of high-definition pictures. There were 70 such sites for the Winter Olympics (Fig. 1), and 700 for the Summer Olympics (Fig. 2).” For

the full article, see: <http://ieeexplore.ieee.org/document/7237992>

50 Years Ago in the Journal

The June 1968 *Journal* published in “Picture Quality: Film vs. Television” by A. Abramson: “The American standard FCC-approved television system is capable of transmitting a monochrome ‘live’ picture equal to and in many aspects superior to that of 35-mm motion-picture film. In fact, it has been able to do this since the introduction of the 4 ½-in. image-orthicon camera tube some 8 years ago (1960). Yet the myth has been widespread that our American system is barely equal to 8 or 16 mm in picture quality. However, there is much evidence to prove that the television system presents an image to the eye superior to that of the motion-picture film. The objective of this paper is to disprove for all time the myth of the superiority of motion-picture film...it is apparent that in three major categories—aperture response, light-transfer characteristics, and signal-to-noise ratio—the television system can be equal to a 35-mm film process and not inferior to it. In addition, the live television image is superior to 35-mm motion-picture film in certain other aspects of the picture quality...Visual Presence (Edge Enhancement...)

Detail Contrast Ratio...Superior Audio Quality)...Tonal Rendition... Light Range...Superior Optical Speed...Maximum Continuity of Action...Screen Brightness...Picture Steadiness...Image Structure.” For the full article, see: <http://ieeexplore.ieee.org/document/7262708>

75 Years Ago in the Journal

The June 1943 *Journal* published in “Washing Photographic Films and Prints in Sea Water” by G. T. Eaton and J. I. Crabtree: “As early as 1897, M. P. Mercier recommended a hypo eliminator solution consisting of three parts iodine, 30 parts salt, and 30 parts sodium carbonate in a liter of solution. Sea salt was suggested as a substitute for salt. It was claimed that this solution would permit complete elimination even when the films or prints were incompletely fixed so that neither silver nor hypo remained. Sodium chloride, the main constituent of sea water, was recommended for use as a hypo eliminator by Dr. Bannon in 1888–1889 without detailed instructions and by O. Baysellance who suggested that prints should be treated “one-half to one hour in 3% sodium chloride and then rinsed three or four times in water.” In order to show the relative effects of sea water and fresh water on the removal of hypo, the developed Eastman Verichrome film was fixed for 10 min in F-5 fixing bath then washed in sea water obtained off the Maine Coast and in regular tap water (Hemlock Lake) used in Rochester... Permanency as measured in terms of the tendency of film and print samples to fade was determined by storage of the samples over water in a sealed all-glass container kept at a temperature

of 110 F...Under the conditions of the accelerated fading test images on Verichrome film did not fade.” For the full article, see: <http://ieeexplore.ieee.org/document/7252714>

100 Years Ago in the Journal

The April 1918 *Journal* published in “Some Consideration in the Application of Tungsten Filament Lamps to Motion Picture Projectors” by L. C. Porter and W. M. States: “The fact that there are today in operation approximately one thousand motion picture machines using the tungsten filament lamp as a light source proves that the incandescent lamp is a success in this field...Few engineers or operators fully realize how closely it is possible to work with the incandescent system. In the arc system, there must be more leeway. The carbon crater covers considerably greater area than is actually necessary, so far as light utilization alone is concerned. However, the arc is more or less unstable. It wanders around, and hence, some allowance must be made to meet that condition...Presumably the condenser and objective lens are properly lined up at the factory and it should not be necessary to change this setting. It is good, however, to check this matter and to use great care after moving the

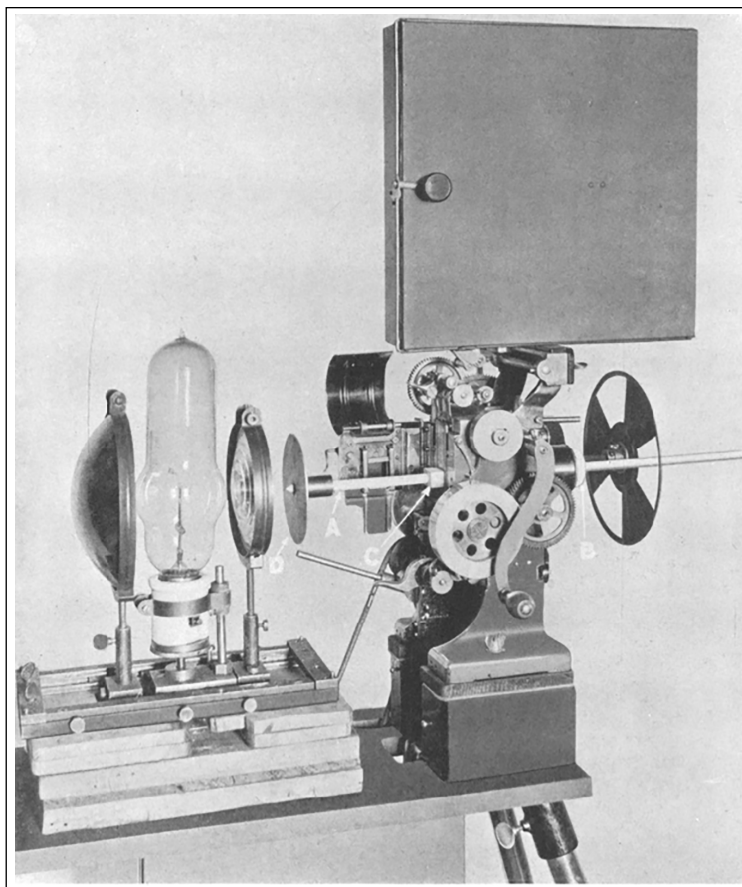


FIGURE 1. *Trans of SMPE*, April 1918, p. 63.

lamp-housing sideways for lantern slide projection to get it back in the proper position before continuing the motion picture projection... If one is to line up quite a number

of machines, time may be saved by having a simple mechanical device made for this purpose (Fig. 13).” For the full article, see: <http://ieeexplore.ieee.org/document/7308287/>

SMPTE

Join
the SMPTE
Board of
Editors



The SMPTE Journal is seeking members interested in actively participating in its online peer review process. Members of the Board of Editors have the opportunity to review and evaluate papers submitted for publication in their areas of expertise and interest. Board membership also provides the opportunity to suggest and discuss important issues in motion imaging to determine relevant topics for publication in the Journal. Working with the Board of Editors Chair, Managing Editor, and your colleagues on the BoE in shaping and maintaining a high level of editorial quality in the Journal, you will provide a valuable service to all SMPTE members and the Motion Imaging industry in general. If you would like to join this volunteer effort please contact Glen Pensinger, BoE Chair, for further information at glenpensinger@ieee.org.