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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>.

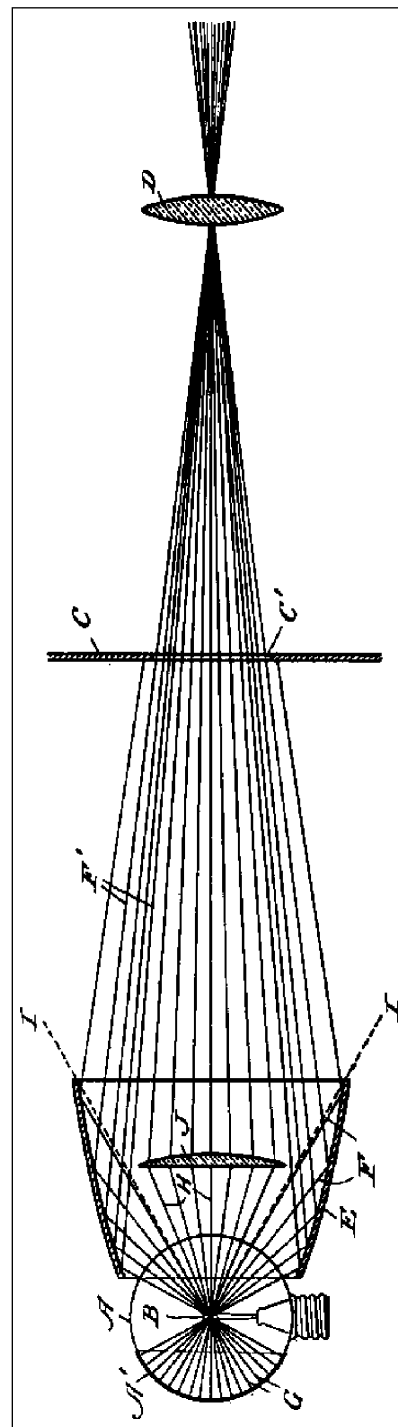
25 Years Ago in the Journal

The May 1993 *Journal* published in: “Advanced Television Systems—The Situation in Germany and Central Europe” by Ulrich Reimers: “The future of television in most parts of Europe is to a large extent subject to regulatory decisions by the European Community (EC). For satellite transmission to the home, D2-MAC and HD-MAC are enforced by a directive of the EC, which highly recommends the use of the new 16:9 aspect ratio. Terrestrial broadcasting in both MAC standards does not seem very promising; therefore, a simulcast scenario is created with MAC signals distributed via satellite and cable, and the existing PAL via terrestrial transmission, cable, and satellite. The possibilities of broadcasting 16:9 programs in PAL have to be investigated further. The standard being developed to fulfill this requirement is called PALplus. Studios and transmission facilities have to be equipped in such a way that all possible transmission formats can be generated and distributed. PAL, SECAM, C-MAC, D-MAC, D2-MAC, PALplus, and

HD-MAC—a plethora of abbreviations is an indication of the complex state of television in Europe. Each step in the development of television standards has created another level of complication.” For the full article, see: <http://ieeexplore.ieee.org/document/7237918/>

50 Years Ago in the Journal

The May 1968 *Journal* published in: “Progress Committee Report for 1967” by R. E. Putman et al: “The use of new and expanding technologies in the fields served by the Society continued its technological growth during the year... In the motion picture industry, the production of features leveled off. This followed the pattern of the previous year. One of the interesting changes during the year, however, was the introduction of feature films into television during prime time by all networks... In the educational field, 16-mm film remained firmly established; however, rapid changes in the 8-mm technology have caused considerable interest; and acceptance may be only a matter of time. In the television business world, the rate of growth leveled off but with a considerable number of changes in technology. The introduction of



Sketch, *Trans. SMPE*, Apr. 1918, p. 27.

electronic video recording, hand-held color cameras, and standards converters are probably the most noticeable changes during the year. Throughout the world, SECAM and PAL were generally accepted. Efforts are being made in various countries to convert black and white facilities to color using the system that they have accepted. This use of three basic color standards throughout the world has increased the necessity of conversion between the various standards. At the present time, conversion is being done either electronically or by the use of film. The use of satellites for education, entertainment, and news is rapidly increasing our ability to communicate with the various countries of the world. Uses of this means of communication reached into the thousands during the year. World wide communication again emphasizes the need for standards, both within countries and between countries.” For the full article, see: <http://ieeexplore.ieee.org/document/7263913/>

75 Years Ago in the Journal

The May 1943 *Journal* published in: “American War Standard, Specification and Description of Color, Approved 17 June 1942, American Standards Association

US-Z44-1942,” “The spectrophotometer shall be recognized as the basic instrument in the fundamental standardization of color...Color specifications computed from spectrophotometric data shall be found by means of the standard observer and coordinate system adopted in 1931 by the International Commission on Illumination...The basic specifications of color shall consist of the tristimulus value, Y , and the trichromatic coefficients, x and y , of the ICI coordinate system, or they shall consist of the tristimulus value, Y , and the dominant wavelength and purity...For the popular identification of color, material standards may be used. The only system of material standards that has been calibrated in terms of the basic specification is represented by the 1929 edition of the Munsell Book of Color.” For the full article, see: <http://ieeexplore.ieee.org/document/7252615/>

100 Years Ago in the Journal

The April 1918 *Journal* published in: “Condensers” by C. Francis Jenkins: “In optical projection, the lantern slide, or the single frame of the motion picture film, is simply a stencil to let directed light therethrough to a receiving screen

upon which the enlarged stencil is imaged. This stencil may be opaque with transparent portions, in definite arrangement, as in titles, or it may also contain half tones as in pictures. If light filtered by this stencil were projected from a point source, a projection lens would be unnecessary. Sharpness of image on the screen depends, therefore, on those rays of light which meet most nearly in a point at or near the shutter position, and in the exact axis of the projection system. All other rays tend to blur the image on the screen though adding to the illumination... Believing that improvement is worth striving for, my own plan for attacking the problem of light conservation in motion picture projecting machines has been along the lines of eliminating the reflection, chromatic, and absorption losses. A considerable part of the absorption loss is avoided by using a single, thin lens; the chromatic loss by avoiding the prismatic edge of the usual blunt-edged condenser lenses and reflecting this as white light toward the aperture together with the usual lens reflection loss. The sketch herewith illustrates how this may be attained...” For the full article, see: <http://ieeexplore.ieee.org/document/7308288/>



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