



Michael Dolan

*In this column, we provide interesting historical briefs from the recent journal articles. 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 traveled in the industry, and (sometimes) how few 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

**T**he August 1992 *Journal* published in “Reproducible Color Gamut of Television Systems” by J. Kumada and T. Nishizawa: “The reproducible color gamut on a TV screen is limited to that area inside a triangle on the chromaticity diagram composed of the three primary colors of the display, while the transmissible color gamut is not always limited within this area. The latter is determined not only by the primary colors of the system but also by the signal processing and/or its amplitude ranges. This article describes the relationship between the transmissible color gamut and system parameters, such as chromaticity coordinates of three primary colors, amplitude ranges of transmission signals, and signal processings (gamma precorrection or constant luminance coding). Signal-to-noise ratio (SNR) in the reproduced picture is also considered. Calculations have been done with several sets of three primary colors that have been proposed for the HDTV standards. It is concluded that all of the existing surface colors can be transmitted

with the SMPTE-C primary colors or those specified in CCIR Rec. 709.” For the full article, see: <http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=7236188>

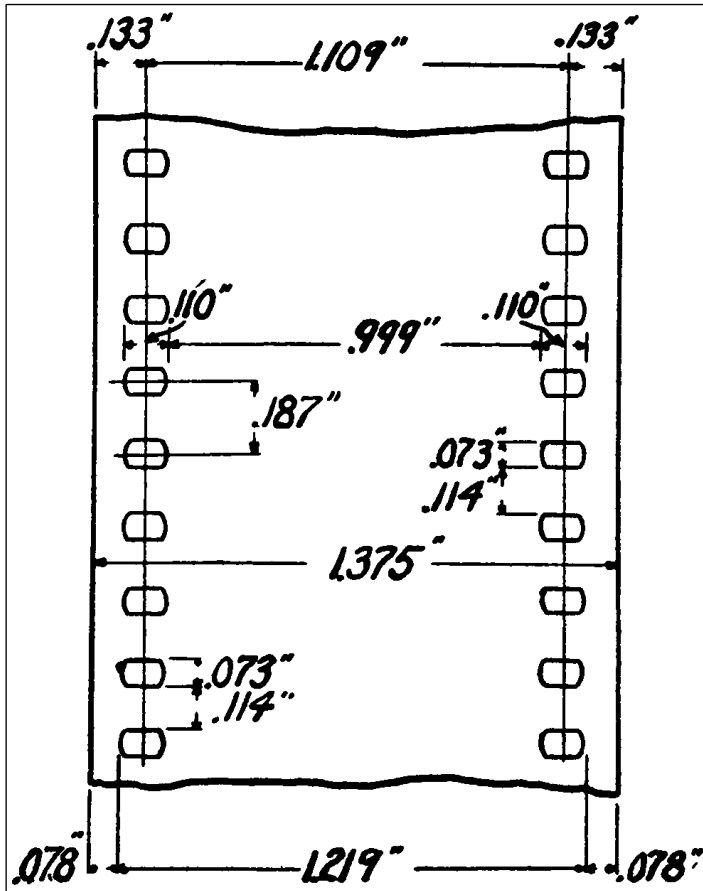
### 50 Years Ago in the Journal

The August 1967 *Journal* published in “Film Processor-Dryer for Lunar Orbiter Photo System” by J. J. Meyers, D. Endter, and R. F. Limoges: “High-quality processing and drying of photosensitive film, completely unattended in deep space and in a zero-gravity environment, present a number of unique problems. The KODAK BIMAT Transfer Film Processing System was selected as the best method for meeting the processing needs of Lunar Orbiter. This system is basically a diffusion transfer process in which the processing chemicals, including moisture, are carried in a thin hydrophilic layer that is coated on an ESTAR Film Base support. This layer is brought into intimate contact with the exposed photosensitive film, where the time processing takes place. In order to maintain a consistently high level of processing quality, the environmental control system for the entire photo system had to be carefully designed. The concept and

operational details of this processor-dryer system are described.” For the full article, see: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7263930>

### 75 Years Ago in the Journal

The August 1942 *Journal* published in “Putting Clouds into Exterior Scenes” by Charles G. Clarke: “A landscape that includes a cloud-flecked sky is far more attractive than the same scene without the clouds, particularly in photographic landscapes, where, without the benefit of color, the cloudless sky area is rendered as an uninteresting expanse of monotone. It has been a long major problem of the studios to be assured of obtaining attractive exterior scenes, for a great deal of equipment and personnel are involved when moving a unit out of the studio. It is not possible to decide suddenly to move out to an exterior location, exterior scenes must be planned well at least twenty-four hours in advance. During the long California summer, weeks on end follow without clouds of any description, and the cameraman is often faced with the problem of having to photograph scenes with little or no pictorial embellishment. Heretofore, in the major productions, it has often been necessary to “dupe” in clouds after the scenes have been made, and sometimes locations at a distance have been chosen where conditions indicated that the chances of obtaining real clouds were reasonably favorable.” For the full article, see: <http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=7252625>



Motion Picture, Standards (Trans. of SMPE, July 1917, p. 11).

### 100 Years Ago in the Journal

The July 1917 *Journal* published in "Motion Picture Standards Adopted in Committee of the Whole Society": "The following have been adopted as standards by the Society of Motion Picture Engineers, and are promulgated to encourage uniformity and standard practice throughout the industry as a whole. Their early universal adoption will save the industry, from great deal of present annoyance against monetary loss. Film speed, a film movement of sixty feet per minute through motion picture mechanisms shall be considered as standard speed; film perforation, the dimensions and location of film perforation shall be in accordance with the illustrating diagram herewith; and standard picture film, shall be one and one-third inches wide and carry a picture for each four perforations, the vertical position of the picture being longitudinal of the film." For the full article, see: <http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=7309026>



### VIRTUAL CLASSROOM

One of SMPE's most innovative educational offerings is the Virtual Classroom program. SMPE provides convenient, high-value learning opportunities to members and other individuals from around the world. SMPE Virtual Classroom courses are "blended learning" courses that include both independent study and live, instructor-led coaching sessions that cover more complex topics and activities.



### THE NEXT CENTURY

View the latest offerings online and register today!  
[www.smpte.org/courses](http://www.smpte.org/courses)