SMPTE ALMANAC

By Michael Dolan

In this column we provide interesting historical briefs from 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 is not meant to be an authoritative reference, and no attempt is made to correct any past errors or omissions of the Journal. We simply hope you enjoy the material.

25 Years Ago in the Journal

The April 1977 *Journal* reported in an article in "How the Communications Act Affects You" by R. E. Simonds: "The FCC's power comes from the Communications Act of 1934 and its amendments....The frequency range allocated to Television Broadcasting extends from 54 MHz to 890 MHz....stations operating on the lower vhf channels are authorized a maximum effective radiated power of 100 kW at an antenna height of 500 ft, stations on channels 7 through 13 have a maximum power of 316 kW at 500 ft, and in order to provide equal coverage, uhf stations employ a maximum power of 5 MW..... frequencies have been made available to Land Mobile Services in some of the larger cities using uhf-tv channels 14 through 20 on a shared basis in a manner designed to avoid interference to the television broadcast service....the FCC issues experimental licenses when it is necessary to radiate a signal in just about any part of the radio spectrum for any purpose found by the FCC to be in the public interest....the FCC [has the] authority to incorporate the provisions of international treaties...developed within the International Telecommunications Union (ITU)....The CCITT is the consultative committee for telegraph and telephone matters and the CCIR is for radiocommunication matters. *The initials represent, in French, Comite Consultatif International Telegraph et Telephone, and Comite Consultatif International des Radiocommunications."

50 Years Ago in the Journal

The April 1952 *Journal* reported in "The Nature and Evaluation of the Sharpness of Photographic Images" by G. C. Higgins and L. A. Jones: "The ability of a photographic material to produce pictures having good definition is commonly referred to as its sharpness, which is a subjective concept. The objective quantity $\langle G_X^2 \rangle_{AV}$. DS is shown to be a physical measurement which correlates with sharpness judgments. $\langle G_X^2 \rangle_{AV}$ is the mean of the square of the density gradients, dD/dX, across an abrupt boundary between a light and a dark area in the developed image and DS is the density difference between these areas. $\langle G_X^2 \rangle_{AV}$ is evaluated only for those values greater than 0.005 in density per micron which represents the threshold gradient. It is shown that, contrary to generally accepted belief, resolving power does not correlate well with sharpness judgments and in some cases is even misleading.....When a photographic material is exposed while partially shielded by a knife-edge in contact with the emulsion, the developed image does not end abruptly at eh knife-edge but encroaches on the shielded area and has a diffuse boundary.... When judging the sharpness of this image, the cones of the eye move back and forth across this boundary in much the same manner as the fingers move back and forth across a piece of cloth when judging its roughness."

75 Years Ago in the Journal

The Summer 1927 *Journal* reported in "Why is Make-up Compulsory in the Movies?" by V. A. Stewart: "Make-up for the Movies is a greatly misunderstood art.....When our grandfathers went to the theater, footlighting was the means whereby the major part of the stage was illuminated, and the actors came as near to the footlights so as to render visible all the facial expression they were capable of.....Particular attention is called to the yellowish color that was given by the forms of illumination...so that make-up became a necessity, and colors were devised to offset this yellowness....Whitewash off the walls, red bricks rubbed together to produce a fine powder, lampblack or charcoal from burnt matches, were still in use in my younger days, and, later, the red for the lips was obtained from the cork of a bottle of liquid cochineal. It was about 1870 that certain German actors introduced grease paint which immediately became generally adopted.....many of our actors are still making up for the old yellow lights although we now have Mazda and nitrogen-filled bulbs, spot-lights of single and twin carbon arcs, nitrogen Olivettes of high amperage, incandescent lamps, etc."