

# SMPTE ALMANAC



By Michael Dolan

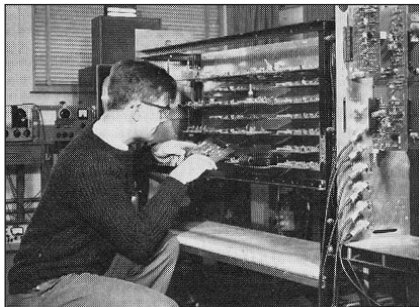
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*In this column we provide interesting historical briefs from the Journal articles of days past. The purpose of this column is primarily entertainment, but we hope it will also stimulate your thinking and reflection on the Society's history, how*

*far we have come in the industry, and (sometimes) how some things never change. This 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 December 1980 *Journal* reported in "Digital Methods in Picture Origination Equipment—An Overview" by J. Richard Sanders: "Digital methods so far have been used relatively little in picture origination equipment such as cameras and telecine, mainly because analog methods have been considered adequate and less expensive. There are signs, however, that the situation is slowly changing—as digital processing begins to be used for signals from image sensors. A complete all-digital channel has been in experimental use at the BBC for several years; stability and performance are good. Such all-digital channels may gain in popularity, owing to recent developments in flying spot and solid-state telecines. Much depends on the availability of high-resolution (at least 11 bits) high-speed analog-to-digital converters. Interest in the digital coding of broadcast television signals may be said to have started in about 1966. By that date several organizations, including Bell Laboratories in the U.S.A. and the BBC, had built suitable analog-to-digital converters (ADCs)... Figure 1 shows this first BBC analog-to-digital converter (1966). It produced 6 bits (only 64 levels) with a sampling frequency in the range of 13 MHz."



*First BBC television analog-to-digital converter (1966).*

## 50 Years Ago in the Journal

The December 1955 *Journal* reported in "Color in Television Studio Lighting" by Rollo Gillespie Williams: "...Color perception is related to the relative and simulta-

neous responses of the three cone mechanisms, and in normal human vision the color reflectance values of external objects are determined to a large extent by the spectral energy distribution of the illuminant. Thus, color rendition varies considerably with fluorescent lamps of different color qualities and with daylight and incandescent lighting. For example, complexions are flattered and the red element in colors emphasized with the Deluxe Warm White fluorescent lamp, whereas the Standard Warm White lamp sometimes makes complexions appear sallow, while deep reds are somewhat dulled. In this connection an interesting point arises, inasmuch as the light from both Deluxe and Standard Warm White lamps appears to the eye to be almost identical, whereas their spectral energy distributions are quite different. These two lamps are also plotted on the same point in the CIE chromacity diagram...thus, the...color temperature would be misleading, inasmuch as both would receive the same rating and no information would be provided concerning their different spectral energy distributions."

## 75 Years Ago in the Journal

The December 1930 *Journal* reported in "Progress in the Motion Picture Industry": "Throughout the spring and summer of 1930 a gradual increase was noted in the efforts to establish the sound picture as a medium of good entertainment and lift it out of the realm of pure novelty...Further progress has been made on the large picture problem, and, although final agreement still remains to be made on film width and picture shape, the engineering details have been settled and the outlook is hopeful for an early compromise on the remaining questions...Satisfactory international settlement of certain patent difficulties in European countries has encouraged the producers and exhibitors abroad to invest more heavily in sound equipment and installations were proceeding at a rapid pace...Sound-on-film recordings appeared to be gaining in favor over disks as a result of better technic in recording the sound and processing the records, as well as the advantage of having sound and picture as an integral unit...Interest in television has increased rapidly during the past few months in this country and abroad. Two public demonstrations were given as part of regular theater programs, one of which ran for a fortnight at a London variety house...Color as an adjunct to sound pictures appeared to have been over-sold to the public during the past year..."