BY MICHAEL DOLAN

25 Years Ago in the Journal

The April 2001 *Journal* published in: "Balancing the Technologies in Digital Cinema Systems" by Steven. A. Morley, K. S. Thyagarajan, and Chris Irvine. "An efficient digital cinema system design balances the use of off-the-shelf technology with specialized hardware and software designed to meet the specific needs of this application. For instance, the use of standard computer, storage, networking, and communication equipment results in cost-effective design that benefits from other widespread uses of these technologies. However, certain functions required for a high-quality, reliable, secure digital cinema system must be custom developed specifically for this application. Electronic projection equipment, image compression systems, and security subsystems are three areas in which existing technology developed for other applications will not be adequate to meet the demands and current practices of cinema operations. This paper addresses the proper combination of off-the-shelf high-volume equipment and technology specifically developed for an acceptable digital cinema system solution." For the full article, see: https://tinyurl.com/4ayufwbc

> "An efficient digital cinema system design balances the use of off-the-shelf technology with specialized hardware and software designed to meet the specific needs of this application."

50 Years Ago in the Journal

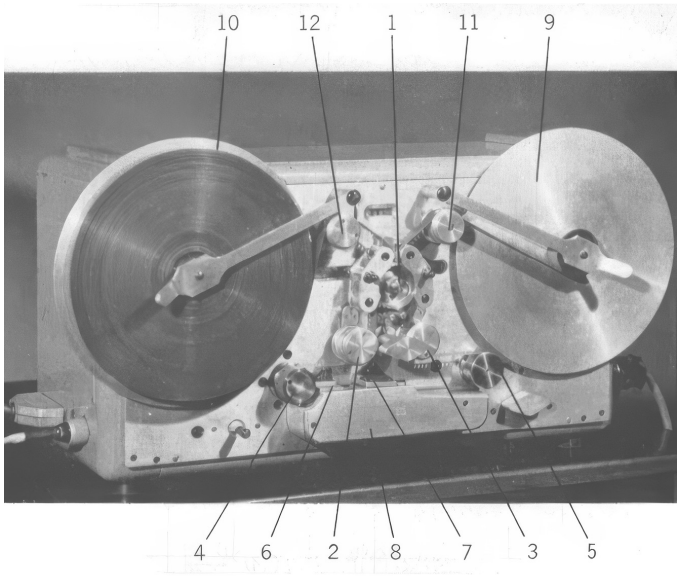
The April 1976 *Journal* published in: "The Industrial Engineer and Plant Design" by Charles F. Fity. "The role of the industrial engineer in the construction of facilities such as Technicolor's large new film-processing plant is examined. (With a processing capacity of 15 million feet or 4.6 million meters of film per week, this is certainly one of the largest such plants in the world.) People in the areas of plant and operations management are generally "too close" to the problem to be effective designers of such

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.

a facility, although their input into the study is a requirement. They may be able to define productivity, but they do not always know how to get it. The industrial engineer is the link between the operational people and the design engineer. Using flow charts, plastic grids and templates, job descriptions and other data, including his personal knowledge of plant operations and procedures, the industrial engineer develops the optimum layout." For the full article, see: https://tinyurl.com/56vhkv2n

75 Years Ago in the Journal

The April 1951 *Journal* published in: "A German Magnetic Sound Recording System in Motion Pictures" by Martin Ulner. "Contrary to corresponding developments in the United States and Great Britain our starting point was to employ the magnetic-sound technique in the studio until the final re-recording on sound negative film. We did not take the necessary equipment from the optical recording system but developed new equipment for magnetic film; and we retained the 6.5-mm magnetic tape for original recordings because of its economy...In the recorder **(Fig. 1)** the magnetic film is transported by a 32-tooth sprocket (1). Film stabilization is controlled by a filter of two pivoted rollers (2 and 3), a large flywheel on the shaft of the primary sound drum (4) and a small flywheel on the shaft of the secondary sound drum (5). In order to keep the film from becoming mechanically damaged, the large flywheel, which is at the start coupled with the motor, is driven until it has gained full speed and is then uncoupled automatically." For the full article, see: https://tinyurl.com/56yhcfdj



Magnetic sound recorder (**Fig. 1** from *JSMPTE*, Apr. 1951, p. 413).

100 Years Ago in the Journal

The May 1926 (issue 25) *Transactions* published in: "Scoring a Motion Picture" by Victor Wagner. It Takes years to accumulate a fund of musical knowledge before one is able to synchronize the music with the picture. A musician who through ignorance or whim chooses music which burlesques a serious scene commits an offence, he destroys the science and art of musical presentation of motion pictures. One has to have at his command a musical library of a thousand different numbers and a sensitive feeling for their different moods to be able to classify the numbers properly. The well-known operatic melodies are not very useful, as they fit only the scene for which they were written and which scene the public visualizes on hearing the music. It is therefore important to consider the key in which each number is written to make a smooth musical bridge from one selection to another. In selecting the most appropriate music, one has to be careful not to anticipate the development of character so as not to stamp immediately the man with the cigarette as a villain; or, when a particularly beautiful girl enters, not to draw too hastily the third line of the triangle. Again, if one sees a man walk into a room wearing a derby and having a cigar in his mouth, one does not play mysterious music at once, because he may not be a detective after all. Not only is a knowledge of high-class music necessary but also a knowledge of most of the popular and national music with their characteristics of practically all the civilized and uncivilized nations." For the full article, see: https://tinyurl.com/hyhpentx

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