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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 is sponsored by Television Broadcast Technology, Inc., since March 2001: <http://ieeexplore.ieee.org/document/7257346>

25 Years Ago in the Journal

The May 1998 *Journal* published in: “525-Line Progressive Scan Digital Broadcasting System Via Satellite” by Joji Urano, Hironao Sakaguchi, and Shin-ichi Tamura: “In Japan, the CS digital broadcasting standard was finalized in 1995, and ‘PerfecTV,’ the country’s first digital multichannel broadcasting service, was launched in October 1996. Digital broadcasting has the potential of offering high-picture quality in addition to multichannel service, but higher picture quality services above NTSC or PAL have yet to be realized despite much anticipation. Against this background, the Nippon Television Network Corp. (NTV) proposed and developed a ‘high picture quality’ digital broadcasting system using the 525P signal and constructed a prototype system. This is the first implementation in the world of a realtime MPEG-2 encoder and an IRD for 525P. An MPEG-2 multiplexer was developed for interfacing with the 525P as well.” For the full article, see: <https://ieeexplore.ieee.org/document/7245878>

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50 Years Ago in the Journal

The May 1973 *Journal* published in: “Progress Committee Report for 1972: Television” by Kenneth M. Mason: “The major impact upon both broadcast and non-broadcast television in 1972 has been the introduction of cassette and cartridge videotape equipment. The increased use of quadruplex videotape for commercials and spot announcements in broadcasting has resulted in a demand for tape playback equipment that is difficult, if not impossible, to meet with existing reel-to-reel plant facilities. Consequently, automated quadruplex cassette equipment promises to be the broadcaster’s alternative to substantial expenditures for additional reel-to-reel equipment facilities and the accompanying increased operating costs. Furthermore, by means of time-based stabilization equipment, the lower-cost helical-scan players, both cassette and reel-to-reel, may be a significant competitor to the quadruplex VTR—the standard in broadcasting operations since its introduction in 1956.” For the full article, see: <https://ieeexplore.ieee.org/document/7233387>

75 Years Ago in the Journal

The May 1948 *Journal* published in: “Optical Sound-Track Printing” by John A. Maurer: “It is well known that the nearly universal practice of printing soundtracks by contact on the periphery of a rotating sprocket introduces significant amounts of flutter and also amplitude modulation of the higher frequencies of the record, principally at the sprocket-hole frequency. An optical one-to-one ratio printer in which the negative and the printing stock are driven separately by good constant-speed mechanisms has given substantially improved quality in printing 16-mm soundtracks...The optical system for sound-track printing must be able to resolve patterns several times finer than the highest frequencies on the sound negative, and, for printing on color films, must be especially free from the higher-order chromatic aberrations, secondary spectrum and chromatic variation of spherical aberration. Ordinary photographic lenses are unsuitable.” For the full article, see: <https://ieeexplore.ieee.org/document/7235948>

100 Years Ago in the Journal

The May 1923 *Journal* published in: “The Discrola” by C. Francis Jenkins: “The Discrola is a machine for the projection of motion pictures in the home and has been attained by the invention of continuous motion in picture mechanisms, and a picture record, which consists of a plurality of paper discs. The Discrola

machine is cabinet-like and at the top is a rotating table upon which the picture disc is placed, with two small lamps for illumination, and an arrangement of oscillating mirrors for projecting the picture onto a screen in the lid of the machine when it is opened. The table is rotated with a small motor. The pictures on the discs are printed from standard motion picture film, in an automatic machine that transfers the pictures from a positive ribbon film to a single circular row of exposures on the cut film negative. When this is developed, paper prints are made from it as from any other negative. From these paper prints, a lithographed edition of the record is made, perhaps in color...That is



Discrola for Home Motion Picture Entertainment (Fig. 1 from *Trans. of Society*, May 1923, p. 234).

about all there is to the machine, namely, a motor to rotate the picture-record table in an illuminated field, and two small oscillating



Discrola Motion Picture Record (Fig. 3 from *Trans. of the Society*, May 1923, p. 236).

mirrors for bringing these continuous running pictures into a stationary position on the screen in the lid of the Discrola." For the full article, see: <https://ieeexplore.ieee.org/document/7230200>

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