



BY MICHAEL DOLAN



25 Years Ago in the Journal

The July 1999 *Journal* published in: “DTV Transmitter Installation Experience and Planning” by David A. Sparano: “The advent of ATSC digital television (DTV) in the US. has created the need to install an entirely new terrestrial transmission infrastructure nationwide...the broadcast engineer will face a wide variety of challenges brought about by the requirement to install and maintain a second full-power television transmitter. There will be technical challenges, such as the need to adapt to a new transmission format, 8-vestigial sideband (8-VSB), with its unfamiliar performance parameters and measurement techniques. There will also be the physical challenge of installing a large, complex, transmitting system—oftentimes at an NTSC site where space and electrical power were at a premium even before the advent of DTV...The first major task facing the broadcast engineer is that of selecting a transmitter with the appropriate transmission technology for their particular application. There are two major transmission technologies employed in high-power DTV transmitters today: vacuum tube amplifiers and solid-state amplifiers.”

DEVELOPMENTS SUCH AS FILM AND VIDEOTAPE, ENHANCED BY THE ADDITION OF SOUND AND COLOR, HAVE EXTENDED THE USES AND THE IMPACT ON OUR SOCIETY...

50 Years Ago in the Journal

The July 1974 *Journal* published in: “The Videodisc: The Next Step in the Communications Evolution” by Robert T. Kreiman: “Ever since the first lantern slide was projected, the impact of presenting visual messages to large audiences has excited men. Developments such as film and videotape, enhanced by the addition of sound and color, have extended the uses and the impact on our society... The videodisc is a disc record of a color television picture with sound. That’s rather simply stated but it is a record not unlike what we know as a phonograph record, which is pressed, easily shipped and stored, easily used. The systems being developed now...take three basic formats: *Mechanical*—which is similar to phonographs...It obviously requires very high-speed operation because you have to extract much more information than you would with a phonograph record. *Optical*—which is bifurcated. The optical system reads the information with a light beam or a laser beam. One system is transmission. Here the information is stored on a film-type material, the light beam reads by shining through it. The other system is reflective, where a foil-type material, a reflective material, is put on the re-

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.

cord and a laser beam is reflected off of it to provide the picture and sound information. *Magnetic*—which in effect provides a videotape type of system but using a rotational piece of tape instead of linear tape...The companies developing hardware, that are known to us at this time, include a combination of Telefunken and English Decca or London Records which is marketed under the brand name of TED, the MCA Disco-Vision System, the Philips Video Long Play, I/O Metrics, Zenith/Thomson-CSF, and Radio Corp. of America.”

75 Years Ago in the Journal

The August 1949 *Journal* published in: “Progress Report—Theater Television” by Barton Kreuzer: “The first work, started in 1928, culminated in a demonstration in January 1930, in the RKO-58th Street Theater in New York City... This led to the famous 1940 demonstration which some members of the SMPE witnessed at the New Yorker Theater in New York. (See **Fig. 1**.) Here a 441-line picture was

shown with low brightness on a 15- x 20-foot screen using Schmidt-type reflective optics. Further development was interrupted by the war. Following the war, the RCA Laboratories reconditioned this same system, introduced an improved kinescope, revised circuits to operate on the new 525-line standard, and used the equipment in the summer of 1946 to show the Louis-Conn fight to an estimated audience of 3000 on the lawn of the Laboratories in Princeton.”

100 Years Ago in the Journal

The September-October 1924 *Journal* published in: “Progress in the Motion Picture Industry, 1924 Report of the Progress Committee:” C. E. Egeler, Chairman; P. R. Bassett; J. I. Crabtree; J. A. Ball; Rowland Rogers; Wm. T. Braun: “The past year in the motion picture industry has been characterized more by improvements in processes and equipment previously available rather than by outstanding new development in the art...In Germany especial effort toward the standardization of sprockets has been made, the Kino-technische Gesellschaft functioning in a manner generally similar to our own Standards Committee and the English Committee on Standard Measurements. Interest in the radio transmission of motion pictures has been accelerated by the commercial sending of still pictures by wire...The reproduction of the voice and music in synchronism with motion pictures of short lengths has been presented commercially during the past year...the 1923 Exhibition of the Royal Photographic Society contained a new section on cinematography...Portable projectors enable [methods of safety] to be shown before groups which otherwise could not be reached. In the preparation of this report your committee has utilized...the monthly Abstract Bulletin of the Eastman Kodak Company, as the principal sources of the material.”



Equipment used in New Yorker Theater Demonstration, 1940, 15 x 20-ft picture (Fig. 1 from *JSMPE*, Oct. 1949, p. 129).

DOI: 10.5594/JMI.2024/YCZT9541
Date of publication: 15 July 2024