



# SMPTE ALMANAC

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Sponsored by Television Broadcast Technology

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.

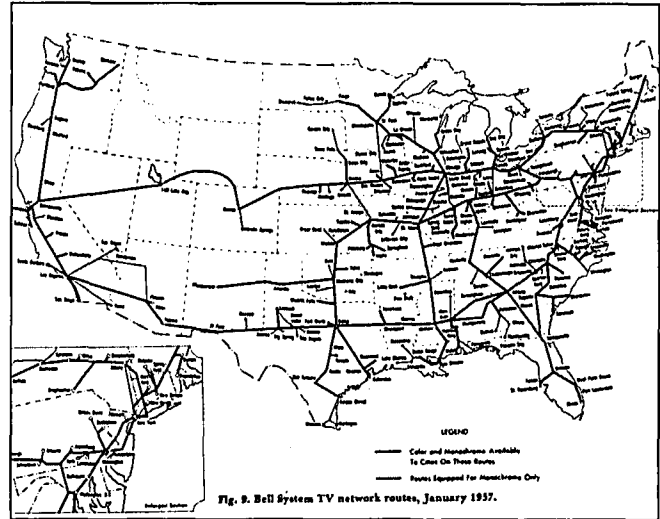
## 25 Years Ago in the Journal

The June 1982 *Journal* published in "News: CBS and NHK Present High Definition Television and Electronic Cinema Demonstrations:" "CBS and NHK (Japan Broadcasting Corporation) jointly sponsored a series of demonstrations of high definition television (HDTV) beginning in January in Hollywood and held in New York City, February 9 and in Washington D.C., February 24-25. HDTV systems with 1,000 or more scanning lines provide sharper pictures, improved color quality, wide-screen format, and stereophonic sound. To create high definition videotapes, Francis Ford Coppola of Zoetrope Studios, Glen A. Larson of 20th Century-Fox, and the CBS Television Network used prototype equipment. Developed by NHK engineers in cooperation with three Japanese manufacturers, Panasonic, Sony, and Ikegami, the system includes a wide range of cameras, videotape recorders, monitors, receivers, and large screen projection displays, as well as experimental microwave and glass fiber transmission systems...Because HDTV has a picture quality that is close to that of film, film director Frances Ford Coppola believes high definition videotape could be used to produce feature length movies...His *Six Shots* and *Double Suicide* were written and produced especially for the high definition demonstrations."

## 50 Years Ago in the Journal

The May 1957 *Journal* published in "Transmission of Color Over Nationwide Television Networks" by Frank A. Cowan: "The nationwide television networks are furnished by means of television channels over Bell System routes now carrying over 75,000 miles of intercity channels. In addition there are hundreds of miles of local channels within the cities where the networks terminate. There are two types of plant suitable for transmitting the broad band of frequencies required for television over long distances; namely, radio relay and coaxial cable. Radio relay provides about 80% of the total channel mileage today, while coaxial cable provides about 20%...The great bulk of our radio-relay routes makes use of a radio-relay system manufactured by the Western Electric Company, designated TD-2. This is a microwave system operating in the frequency range of 3700 to 4200 mc...[a] question which

arose with the color signal was how to get it through the Type L1 coaxial-cable facilities, since the top video frequency which such channels will pass is about 2.8 mc. The 3.6-mc color subcarrier cannot be transmitted over these channels."



Bell System TV network routes, January 1957.

## 75 Years Ago in the Journal

The June 1932 *Journal* reported in "Thomas A Edison:" "Thomas Alva Edison was the first motion picture engineer...He viewed the problem of the motion picture as the making of a machine, a machine tool in the service of the art of expression...It was in 1887, in a bit of a lull in the laboratory work, and in a day, too, when the commercial affairs of the phonograph were annoying, that Edison took a bit of playtime to spend casually on a machine "that should do for the eye what the phonograph did for the ear." Edison set a staff to work on his preliminary drawings, locked in the secrecy of room five at the West Orange (N.J.) works. His first picture machine was a spiral record of microscopic pictures photographed on a cylinder like a phonograph, actuated with an intermittent motion and viewed under a microscope...In time, he decided upon a machine that would feed pictures the size of postage stamps upon a flexible tape moving past a lens, for viewing them either directly by magnification, or by projection. By the mid-summer of 1889, he had achieved such a machine, but had no satisfactory tape...In the autumn he heard of the coming of George Eastman's flexible medium for roller photography in the Kodak...It worked, and the motion picture was an accomplished fact. Interestingly enough, Edison's concept was a talking picture, and in 1889-90 he built a talking picture machine, a twin phonograph peep-show device."