



By Michael Dolan

*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 July 1982 Journal published in "Considerations in the Choice of a Digital VTR Format" by Hirofumi Yoshida and Takeo Eguchi: "A consensus has now been reached on coding standards for digital video recording. The paper qualitatively analyzes various options and trade-offs relating to the choice of a format in digital high-density magnetic recording. These include: factors affecting tape consumption, relations among the factors that place constraints on the tape format, and the formats that are possible. Also discussed is the azimuth recording method. It is pointed out that substantial improvements are still being made in the evolving analog VTRs, so that much care should be given to the choice of the practical format for digital VTRs... The past two years have seen rapid progress in digital recording technology, together with much discussion and experimentation on video coding standards. During this period the requirements for the digital recorder were unclear. However, a consensus has now been reached: the video signal should be in component form, sampled at 13.5 MHz for the luminance channel and 6.75 MHz for each of the two chrominance channels. This so-called 4:2:2 system, thought to be desirable for a DVTR, has a source data rate of 216 Mbit/sec, including the line and field blanking periods."

## 50 Years Ago in the Journal

The August 1957 Journal published in "Status of Video Tape in Broadcasting" by Howard A. Chinn "Video tape recording has been used for television broadcasting purposes since the Fall of 1956... The first broadcasting application of video tape recording (VTR) was for time-zone delay. Specifically, it was (and is still being) used for delaying the daily 15-minute Doug Edward's News program for two hours for the benefit of the CBS Pacific Network audience. After a week or so of closed-circuit trial runs early in November 1956, broadcasting operations were begun by recording the show in duplicate on video tape and backing this up with both 16mm and 35mm TV film recordings (TVR). On playback, all four recordings were run synchronously—obviously, every precaution was taken to insure against a failure... At the present time (Summer 1957) a fairly heavy delayed-broadcasting schedule is being followed in order to cope with the Daylight Saving Time problem. Briefly, some 40 network programs are recorded weekly in Television City (Hollywood). All of these programs are played back at least once, some of them twice and others three times in order to accommodate the requirements of broadcasting stations in the Central Standard Time, the

Central Daylight Saving Time and the Pacific Daylight Saving Time zones... In common with just about every new piece of video equipment, when first introduced video tape recorders required considerable debugging. Among the problems encountered, all of which are now under control, were: (a) the question of head life; (b) a phenomenon called head-hunting; (c) head demagnetization; (d) the elimination of transients; and (e) the minimizing of dropouts in the reproduced picture."

## 75 Years Ago in the Journal

The June 1932 Journal reported in "Standardization of Projection Lamps" by E. W. Beggs: "One hundred and thirty types of picture projection lamps are today required to fill the demands placed on the lamp manufacturers. This large number of types, each being available in several different voltages and in most cases with either one of two kinds of bases, brings the total to over 500. The total annual demand for the entire country is only 240,000 units for lamps of this type. The result is that the lamps are expensive and that the amount of engineering that can be devoted to each type is entirely inadequate. This situation is partly because small improvements in lamps have been made almost annually in the past, and partly because of wide diversity of opinion among projector designers. By assembling and coordinating the ideas of equipment designers, an ideal set of light source requirements can be laid down. Based on these requirements the lamp manufacturers can then establish the characteristics of light sources to be introduced during the next few years. Early in 1925, Mr. Hoover, then United States Secretary of Commerce, urged standardization and simplification of articles manufactured in this country."

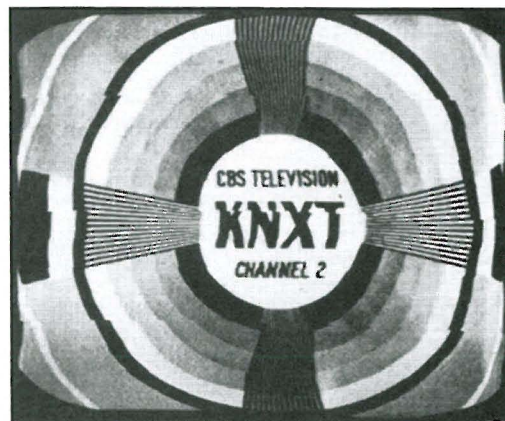


Figure 6. The reproduction of a recording with a different head than used during recording can result in picture degradation as shown. Production video tape recorders will feature compatible heads.