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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/stamp/stamp.jsp?tp=&arnumber=7257346>

25 Years Ago in the Journal

The September 1991 *Journal* published in "Considerations in the Design of HDTV Systems for Terrestrial Broadcasting" by W. F. Schreiber: "The preliminary decision by the Federal Communications Commission (FCC) to require simulcasting of HDTV in 6-MHz channels and to give an extra channel to each licensee who desires it for this purpose sets several important challenges for the system designer. Unprecedented advances in data compression and channel coding are required. In particular, effective suppression of analog channel impairments and very high spectrum efficiency are mandatory. The means by which this may be accomplished, while incorporating a number of other desirable features in a TV system that is to last for several decades, is discussed in this article." For the full article, see: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7234273>.

50 Years Ago in the Journal

The September 1966 *Journal* published in "In Hollywood 50th Anniversary: 100th SMPTE Technical Conference & Exhibit": "Hollywood's glamorous past will blend with

motion picture's and television's bright futures at the 100th semiannual SMPTE Technical Conference and Equipment Exhibit at the Ambassador Hotel in Los Angeles October 2-7... Preceding Monday's Get-Together Luncheon and starting the week's events will be a Luau held the evening of Sunday, October 2, at the Castaways Restaurant in the Verdugo Hills in Burbank. Guests, in addition to SMPTE members and officers, will include film people of the silent and early sound eras. The luau will be open to Conference early arrivals at a cost of \$6.50 per person." For the full article, see: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7262893>.



From JSMPTE, September 1966, p. 882.

75 Years Ago in the Journal

The September 1941 *Journal* published in "High Fidelity Headphones" by L. J. Anderson: "Although the headphone is by no means of recent origin, the high-fidelity headphones and the general analysis of the problem were probably first presented

as late as 1932. Since that time, considerable work has been done, particularly with regard to improvement in response, sensitivity, and mechanical design, though the method of analysis remains unchanged. The desired characteristic of a high-fidelity headphone is to produce a constant distortion-less sound pressure in the ear when constant voltage is applied to the unit. The usual method of accomplishing this is to couple to a simple moving coil and diaphragm system a network as indicated in Fig. 1. Proper choice of constants will produce phone units that will deliver sound of surprisingly good fidelity. If the ear could be considered a small compliance, then the problem of obtaining a satisfactory response would be considerably simplified, since it would be necessary merely to move the diaphragm with constant amplitude throughout the desired frequency range. The ear, however, presents a more complex picture, which is approximately simulated by the simple circuit shown in Fig. 1.

Here the compliance CE, represents the volume of the ear, and the values RL and ML result from the inevitable leakage between the ear-cap of the receiver and the ear. Actually, there are more elements to the circuit, and especially so at the higher frequencies, where the dimensions of the ear become appreciable in term of the wavelength of the sound in question." For the full article, see: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7253066>.



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