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

### 25 Years Ago in the Journal

**T**he September 1998 *Journal* published in “Engineering News: William H. Gates, Chairman of Microsoft Corp. Addresses SMPTE Engineering Committees:” “[He addressed] SMPTE engineering committees on 11 June 1998, at Microsoft’s corporate campus in Redmond, WA...hosted by Microsoft during the week of 8–12 June 1998. Gates welcomed committee members and noted that standards are critical to Microsoft and to the

industries concerned with the future of digital television...He reported on Microsoft Research, the fastest-growing unit in the corporation; MS Research now has 300 people and is expected to double in five years... collective participation in and support of SMPTE will render important developments in the future. Hand-held devices using Windows CE will become very important: high-resolution, flat screen, portable devices will change the nature of personal computers... Microsoft’s involvement in



SMPTE Engineering Vice-President William C. Miller and William H. Gates, Microsoft Corp., at the quarterly meetings of SMPTE Technology Committees in June—photo by C. V. Girod (From *SMPTE J.*, Sept. 1988, p. 833.)

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content is limited to a few games, for example, Golf and Flight Simulator and an encyclopedia.” For the full article, see <https://ieeexplore.ieee.org/document/7245905>.

### 50 Years Ago in the Journal

The September 1973 *Journal* published in “The Use of Super 8 in Broadcasting” by Charles G. Cyberski: “In the summer of 1972, the relatively new station of KDUB-TV in Dubuque, Iowa, as part of a test program made a complete change to super 8 for both news and commercial production. Since that time, well over 85,000 ft (25,500 m) of super 8 have been processed, edited, and aired at the station’s facilities. All three formats (super-8, single-8, and double super-8) have been tested. About 90% of the film used was Kodak Ektachrome EF film 7242 (available in cartridges), double super 8, and prestriped single strand; however, other film stocks were tested, including Kodachrome II movie film (Type A) KA, Kodak Ektachrome 40 movie film (Type A) EMA and Kodak Ektachrome 160 movie film (Type A) ELA. Findings of the test program brought out a critical need for image enhancement with super 8 and also brought out the considerable savings resulting from the use of super-8 film, especially in shipping costs.” For the full article, see <https://ieeexplore.ieee.org/document/7233294>.

### 75 Years Ago in the Journal

The September 1948 *Journal* published in “Parabolic Sound Concentrators” by R. C. Coile: “Olson and Wolff, of the Radio

Corporation of America, developed a combination horn-reflector concentrator in 1929. Obata and Yosida, of Tokyo University, published measurements of amplification in 1930. Hanson, of the National Broadcasting Company, described the use of parabolic reflectors in broadcasting in 1931. Dreher reported in 1931 on the use of microphone concentrators in motion picture production. Sato and Sasao published the results of tests on the sound fields of deep parabolic reflectors in 1932. Rocard published an analysis of the theory of the amplification of the reflector-type parabola in 1932. Schneider of the Moscow Radio Center made amplification and directivity measurements in 1935 while studying the application of parabolic concentrators to Russian broadcasting and checked his amplification data with Rocard's theory. Gutin, in Leningrad, independently derived

the theory of amplification and went on to analyze directivity in 1935." For the full article, see <https://ieeexplore.ieee.org/document/7247944>.

### 100 Years Ago in the Journal

The October 1923 *Journal* published in "Motion Picture Camera Taking 3,200 Pictures Per Second" by C. Francis Jenkins: "Pictures are now regularly made at the rate of 3,200 photographs per second, that is, 200 times standard (16 pictures per second) motion picture speed. In the study of high-speed motion, it is comparable to a microscope of 200 diameter power in the study of small objects. Speeds still higher are believed feasible, but perhaps not often required...Most of the surprises have been found in the simplest subjects. In photographing a little girl skipping a rope, it was discovered that the loop end of the rope after it dragged under her feet accelerated much faster than any other part of

the rope, so that the loop actually reached a vertical position above her head well in advance of any other part of the rope. No plausible explanation for this has yet been proposed by any of those who have seen these pictures...Perhaps, the most interesting subject was the photographing (at 3,200 exposures per second) of pigeons' wings when the pigeons were released from a basket. It is a classic. The wings touch both above and below the body of the bird; the wing bones are bent at right angles on the back-stroke and are fully extended, that is, they are straight out from the body, on the forward stroke; and the movement of the feathers show pressure at the tip of the wing far greater than was suspected, and probably accounts for the airplane accidents in which crashes have occurred because of the loss of an aileron." For the full article, see <https://ieeexplore.ieee.org/document/7451366>.

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