116th Conference Program
Symposium on Program Identification Systems

By R. J. ZAVADA, *Chairman,* SMPTE Working Group

Edit. Note: *After the SMPTE's filing with the Federal Communications Committee the tutorial reports on "Ancillary Signals in Television Broadcasting," subsequently published in the February, March and April 1974* Journals, *a continuing need for information was recognized. The matter was taken up by the Joint Committee on Intersociety Coordination which established the Ad Hoc Committee on Television Broadcast Ancillary Signals, the organization and administration of which became the responsibility of the National Association of Broadcasters (see the Interim Report by Robert A. O'Connor, December 1973* Journal, *pp. 1017–1020). Subsequently an SMPTE Working Group with R. J. Zavada as Chairman was charged with investigating the technology for program identification. The Chairman's informal report at the recent SMPTE Conference Get-Together Luncheon follows.*

At the 116th conference of the SMPTE in Toronto in November of this year, we shall have something new and interesting for you—we want to talk about Bits, Bauds and Billions.

The Bits and Bauds are part of electronic data processing. Bits are the little segments of information that can be put in motion-picture film or videotape for electronic data processing. Bauds are a measure of the number of bits transmitted per second. The Billions represent the advertising dollar expenditures in the broadcast industry and provide the basis for being concerned about coded information over television. The new Working Group on Program Identification Systems of the SMPTE is addressing itself to a study of technology needed to evaluate the results of the billions of dollars expended.

The evaluation of advertising in television is unique — and can be realized when one equates TV advertising time with printed advertising space. Advertising space in newspapers and magazines can be evaluated at some later time by clipping the ad and measuring the square inches to equate the time and space of the ad with the expense and advertising objectives. However, in television one only obtains a glimpse of the ad with an earful of information and then, unless recorded, it cannot be physically recalled. The industry recognizes that this is a potential problem and desires some means of knowing when and where and with what quality a television commercial plays. The more than 700 television stations throughout the United States issue reports on the log of their station operations. Some users of these reports claim that they contain inaccuracies, and, as a result, there has been developed the business of providing some means of "proof-of-play." The proof-of-play or program identification is currently being directed toward commercials, but may, at a later date, apply to entertainment program material, and possibly even live programs, which would allow full automation of station logging requirements.

Economics and New Technology

Based on this potential business need and the evolvement of new supporting technology we believe we have the "makings" for an interesting symposium in conjunction with the 116th conference in Toronto.

Reflecting on a brief synopsis of the proposed content shows plans to review the technology including the video code concepts currently providing an automated form of program identification to the industry. Part of the new technology proposed is the insertion of codes in the audio spectrum at a subaudible level so that the code is contained as part of the music or voice portion of the commercial, but would not be disturbing to the home listener-viewer. We would also hope to acquaint you with another technological aspect — an approach that can identify commercials without a code — known as "pattern recognition" or "signature systems." With this approach, nothing needs to be done to the soundtrack or to the video portion during production or reproduction. One only needs to give a device an opportunity to "see" or "hear" the commercial and thus "process" or "signature" it for future recognition using computer technology.

[The above] is primarily the technological basis of the symposium; however, a very important question rests with what are the business needs.

Are the business needs real and of sufficient significance to justify developing the automated technology for commercial and program identification. In a sense, such is already justified because there have evolved several businesses which identify commercials on a manual basis, that is, versions of someone sitting and watching a commercial and recording it manually when, where and how it plays. At the symposium we hope to answer the need question by examining the business aspects and attempting to forecast the impact a successful technological development for automated means of commercial and program identification may have upon the industry.

Royalty and Copyright Interests

Throughout the background of program identification there has been touted the needs of the talent guilds, that is, the American Federation of Television Artists (AFTRA), and those of the Screen Actor's Guild (SAG). The guilds report that the actors and actresses need to know the frequency of their exposure to the public in commercials, as well as achieve certification of their performance contract in terms of residual payment. The performers' contract for commercials is quite complex and block-booking by TV market areas alter the payments made to the performers. Accounting requirements, as to whether a commercial is shown or repeated, become significant to subsequent payments — consequently we wish to obtain the talent guilds' input to the Toronto symposium.

If we insert codes into commercials we are confronted with the fact that they potentially fall under some regulatory aspect of the Federal Communications Commission. We are aware that the Commission is very interested in the work the Society is doing and, in fact, has encouraged the formation of the Society's Working Group to provide technical tutorial information to its regulatory process on the proposed rule making for audio codes. We plan to encourage addresses or papers by the Commission.

Another aspect that code systems potentially have is a basis for providing copyright for coded material. Consequently, our work has several legal implications, especially noting that the copyright law under which we live was developed in 1903, prior to the widespread use of film and sound. Many recognize the need for the revision of the copyright law and it is now before Congress and the courts; consequently, we hope to encourage papers on the copyright implications of successful encoding technology.

As you can see from my previous comments, the Toronto symposium will probably stress the business balance more than the detailed technological characteristics of program identification systems. We believe that this approach may provide significant interest to you as members, as well as drawing the users of the film and television discipline to a greater understanding of the functions of the SMPTE.

[The specifics will be given in subsequent *Journals*. Suggestions for specific Symposium papers are invited as are all interested parties and persons.]

A report by R. J. Zavada, Chairman, SMPTE Working Group on Program Identification Systems, c/o Photographic Technology Div., Kodak Park Bldg. 69, Eastman Kodak Co., Rochester, NY 14650.

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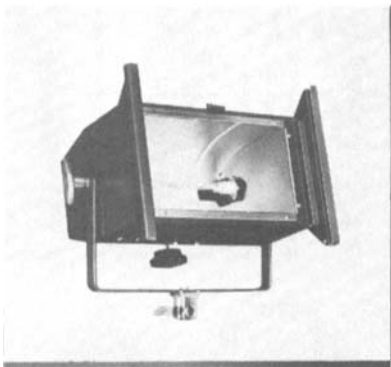

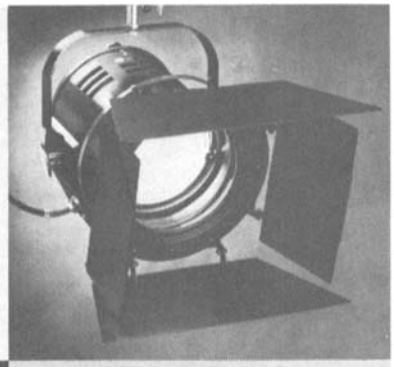

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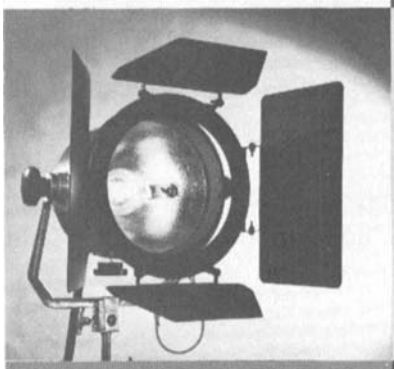

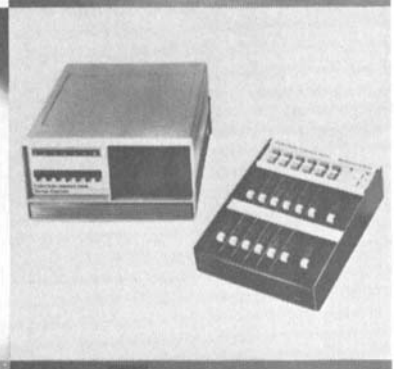

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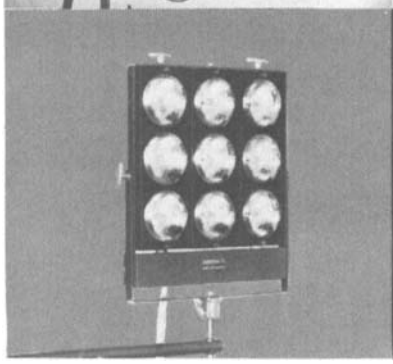

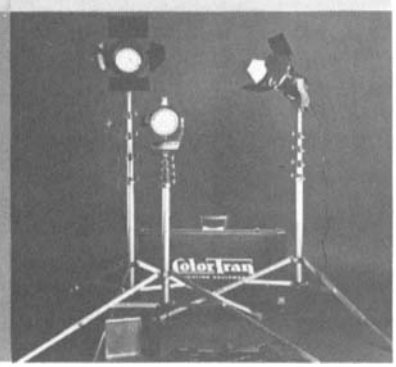

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