in today's editing systems. To be successful with editors, an editing system must be flexible, must employ instructions that are in English rather than computer language, and must have as many single-function keys as possible. It should not be necessary to use keyboard contortions to make an edit. Obviously, it is impossible to totally eliminate all computer dialog with the editor, but I feel strongly that much confusing data could be phrased in vastly simpler terms.

Another needed improvement is a standardized keyboard and edit-list format so that editors going from one system to another won't be confused. The punched tape edit list should be totally compatible among machines of different manufacturers. I am not advocating any particular format, but standards should be established as they have been for VTR compatibility.

Recently I have been consulting for several manufacturers to simplify the controls and make them more user-oriented. No matter how good a manufacturer thinks his system is, it won't sell unless it is accepted by the user. It must be user-oriented or "human-engineered." Nontechnical people should be able to use it effectively after a minimum of training, and it should be compatible with other systems of its type in the field.

What of the Future?

What is the future of tape post production? I am very optimistic. I have seen tape editing go from very crude razor blade editing to breathtaking light-pen editing where edits are made faster than you can blink your eye. The future of post production is tied directly to the new technology being designed by electronics manufacturers. Optical effects such as screen flips, picture repositioning, size reductions and blowups, zoomed images and lots more are available today. There is virtually nothing that can't be done in tape today.

New technology will play a major role in the future of videotape editing. One new device on the immediate horizon is the bubble memory. It has the ability to store enormous amounts of digital data in a small space. This technology could be applied to tape editing to provide practically unlimited raw material storage as well as virtually instant access to it. Another device, the videodisc that is soon to reach the consumer market, promises large storage capability and random access at low cost. As they become available, these and other tools will make the editor's job easier and at the same time make him more confident. The tape editor will no more need to understand the workings of the editing computer than the average motorist needs to be a carburetor expert.

In conclusion I would like to affirm my view that the field of post production and especially videotape editing is exciting and challenging. I am very aware of the multitude of creative efforts that go into making a production — before it ever gets to me. This is the input into the production funnel. The output at the small end is post production, and here is where I find the fascinating challenge to use the talents and knowledge I have to mold and shape images into an entertaining medium. In the past 20 years, television has made enormous strides in editing as well as many other areas of technical development. The transition from film to tape will not be as difficult as some people believe. The industry is making an effort to train and educate people to do this work, and those willing to accept the challenge of this relatively new medium will flourish with it.

120th SMPTE Technical Conference and Equipment Exhibit

29 October–3 November 1978, Americana Hotel, New York City

All the available booth space for the 120th Conference Equipment Exhibit was taken by 29 June, four months before the opening date. The exhibit's 211 booths were reserved by a total of 104 companies. This is the first time the Society has had a sellout so early.

The 120th Conference Exhibit promises to be one of SMPTE's most interesting. Though it will be slightly smaller than the recordbreaking exhibit held in Los Angeles last October (220 booths in L.A. vs 211 in N.Y.), most major manufacturers and suppliers of professional motion-picture and television equipment are participating and many new products will be introduced. Among those who have reserved space are several companies that have never before participated in an SMPTE exhibit.

The Equipment Exhibit is scheduled to begin Monday afternoon, 30 October, and run through Thursday evening, 2 November. It will be open to all Conference registrants at no extra charge. Non-registrants can purchase tickets for $2.50 at the door during exhibit hours.

The 120th Conference exhibitors are as follows:

Ampex Corp.
Angenieux Corp. of America
Arriflex Corp.
Belden Communications, Inc.
Bell & Howell Co. Professional Equipment Div.
Berkey Colortran
Bolex (U.S.A.) Inc.
Robert Bosch Corp.
The Camera Mart Inc.
Canon U.S.A., Inc.
Century Precision Cine/Optics
Chyron Telesystems
Cine 60 Inc.
Cinema Products Corp.
Coherent Communications
CMX Systems, Division of Orrox Corp.
Commercial Electronics, Inc.
Comprehensive Service Audio-Visual Inc.
Comprehensive Video Supply Corp.
Consolidated Video Systems, Inc.
Convergence Corp.
Digital Video Systems
Dolby Laboratories Inc.
Eastman Kodak Co.
Eigen Video
Elmo Mfg. Corp.
Film Equipment Rental Co.
Frezzolini Electronics Inc.
Fuji Magnetic Tape Div.
Fujinon Optical Inc.
General Camera Corp.
General Electric Co. — Lighting Business Group
General Enterprises, Inc.
Goldberg Bros. — J & R Ediquip — Ciro Equipment Corp.
Alan Gordon Enterprises, Inc.
Grass Valley Group
GTE Sylvania
Karl Heitz, Inc.
Hazeltine
Hitachi Denshi America, Ltd.
Hollywood Film Co.
Ikegami Electronics (U.S.A.) Inc.
Image Devices Inc.
JVC
Kliegl Bros.
KLM Associates, Inc. & Old Delft the Netherlands
Laumic Co., Inc.
Lenco, Inc. Electronics Div.
Lipsner-Smith Corp. & Research Technology Inc.
Listec Television Equipment Corp.
L.T.M. Corp. of America
Lowel-Light Mfg., Inc.
L-W International
Magnasync/Moviola Corp.
Marconi Electronics Inc.
Matthews Studio Equipment, Inc.
M B I, Inc.
Magna-Tech Electronic Co., Inc.
Micro Consultants, Inc.
Micro Optics Mechanical ApS
Microtime, Inc.
MM Editing Systems, Inc.
3M Company — Magnetic Audio/Video Products Div.
Mole-Richardson Co.
Motion Picture Enterprises, Inc.
Motorola
Multi-Track Magnetics, Inc.
Nagra Magnetic Recorders Inc.
Neumade Products Corp.
Norton Associates, Inc.
NTI America, Inc.
Nurad, Inc.
O'Connor Engineering Laboratories, Inc.
Pace International Corp.
Pako Corp.
The Perf-Fix Co.
Peterson Enterprises, Inc.
Philips
Plastic Reel Corp. of America
RCA
Rangertone
Recortec, Inc.
Rosco Laboratories, Inc.
Sennheiser Electronic Corp. (N.Y.)

Sony Corp. of America
Soremec-Eclair U.S.A., Inc.
Stellavox Professional Audio & Data Equipment
Strand Century Inc.
Tektronix, Inc.
Tele-Cine Inc.
TeleMation Div. of Bell & Howell
Telescript, Inc.
Television Equipment Associates
Thomson-CSF Laboratories
Twenty-Fourth Frame
Vital Industries

Among the SMPTE exhibitors will be eight British companies:

Allotrope Ltd.
Elf Audiovisual Ltd.
Lee Filters Ltd.
Neilson Hordell Ltd.
Samcine Sales Ltd.
Racal Zonal Ltd.
Photomec (London) Ltd.
The Association of British Manufacturers of Photographic, Cine and Audio Visual Equipment

September Journal

The September *Journal* will be SMPTE's New York Conference Preview issue. It will contain the Conference Advance Program, the Directory of Exhibitors, full information on hotel reservations and conference registration, plus details on the Get-Together luncheon, the banquet, and the ladies program.

Standards & Recommended Practices

Approved American National Standards

On 2 May 1978 the American National Standards Institute approved two American National Standards which are revisions of existing standards: PH22.40-1978, Position, Dimensions and Reproducing Speed of Photographic Sound Records on 35-mm Motion-Picture Release Prints, and PH22.196-1978, Screen Luminance and Viewing Conditions for Indoor Theater Projection of Motion-Picture Prints.

Inasmuch as compliance with American National Standards is purely voluntary, the standards will become truly effective when broad publicity is given to their existence. The Institute and the Society would appreciate any personal influence to promote their use where such action is appropriate. Copies of the standards may be obtained for a nominal fee from the American National Standards Institute, 1430 Broadway, New York, NY 10018.

Approved SMPTE Recommended Practices

The Executive Committee for Standards Approval, acting on behalf of the Board of Governors, approved on 13 June 1978 two SMPTE Recommended Practices: RP 77-1978, Specifications for Azimuth Test Film for 35-mm Three-Track Sound Reproducers, Magnetic Type, and RP 78-1978, Specifications for Azimuth Test Film for 16-mm Sound Reproducers, Magnetic Type. The practices are the result of the transformation of American National Standards PH22.99-1969 and PH22.114-1969, which have been withdrawn. They do not reflect any technical changes in the test films specified.

Approved International Standard

The International Organization for Standardization (ISO) recently approved an International Standard, the technical content of which is published here for your information. ISO 4241-1978, Cinematography — Leaders and Run-Out Trailers for 35-mm and 16-mm Release Prints — Specifications, is in accord with American National Standard PH22.55-1975, Leaders and Cue Marks for 35- and 16-mm Sound Motion-Picture Release Prints.

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Withdrawn American National Standards

A recommendation for withdrawal of approval of two American National Standards was approved by the American National Standards Institute on 26 May 1978. American National Standard PH22.80-1975, Specifications for Scanning-Beam Uniformity Test Film for 16-mm Motion-Picture Sound Reproducers, was withdrawn because all standards specifying test materials are being transformed into SMPTE Recommended Practices. Proposed SMPTE Recommended Practice RP 81 replaces the specifications previously delineated in PH22.80. American National Standard PH22.144-1965, Dimensions and Optical Specifications of Test Slides and Transparencies for Television, is not being followed. A working group of the Television Technology Committee is revising the specifications to reflect current practices. — *Alex E. Alden, Manager of Engineering Services.*

Vertical Interval Time Code Working Group Solicits Information

A working group on Vertical Interval Time Code has been organized to draft an SMPTE Recommended Practice defining information and coding methods to be used when recording VITC (vertical interval time code) on videotape recorders. Two major purposes of the use of VITC are: (1) to reduce the number of channels necessary to carry address information, and (2) to allow the accurate reading of such information during slow-motion and stop-motion playback of video tapes.

In order to maximize the usefulness of the proposed VITC, the working group is soliciting information on the channel capacity of tape recorder formats presently being manufactured or in widespread use.

Information supplied to the working group should include: TV lines available for recording VITC, video bandwidth, transient response, and any limitations due to slow-motion or dubbing operations. Although not specifically defined at this time, the VITC signal is expected to be digital in nature occurring on one or more TV lines within the presently unassigned portions of the vertical interval. Data will be field-oriented and contain essentially the information now included in the Time and Control Code as defined by ANSI C98.12.

Manufacturers of time-base correctors should take note of this proposed use of the vertical interval. Replies, questions, or comments should be directed to the ch hairman of the VITC Working Group: David K. Fibush, Ampex Corporation, Mail Stop 3-59, 401 Broadway, Redwood City, CA 94063. The next working group meeting will be held in early September 1978.

Erratum

Re: Report of the Committee on New Technology
May 1978 Journal, p. 331

Paragraph seven of this report contains an erroneous statement which is corrected as follows: ". . . In general, the test indicated that the NTSC system is not fully utilized. It was evident that a higher line rate is needed for non-broadcast purposes to achieve major quality improvements."