

The Keycode system, which can be read by telecine equipment, makes it possible to cut negatives that have been electronically edited and allows the user to generate a "pull list." Keycode consists of ten numbers in three groups. The last four digits, indicating footage, start at 000 on each 1000-ft roll. Frame line marks are placed every 12 perforations.

Since this is an ongoing project, Kuhn requested audience input. One problem

discussed was that many film workers have become conditioned to reading footage numbers printed in reverse. Gene Cole, GE Medical Systems, suggested standardization as the answer to this problem. Kuhn agreed that all numbers should be read unreversed. However, the matter is still unresolved.

Some modifications in the proposed system have been made since the paper was presented at the 130th Conference.

Footage numbers are to be printed every foot. Another change is that the all-digit number will have letters added to indicate film manufacturer and film type.

Following the presentation and a lively discussion, the 1988 winners of the CLIO competition were shown. After the formal program, the 64 attendees were given a tour of KRON-TV studios by Roy Trumbull. — Vernon L. Kipping (Secretary/Treasurer), consultant.

## News

### M. Carlos Kennedy Delivers Shoenberg Memorial Lecture

SMPTE Past President M. Carlos Kennedy, Ampex Corp., delivered the Shoenberg Memorial Lecture in London, November 3, 1988, at the invitation of the Royal Television Society. The Shoenberg lecture is given annually in honor of Sir Isaac Shoenberg, a pioneer of all-electronic high-definition television. Kennedy was named a fellow of the Royal Television Society.

In his speech, "The Global Standards Dilemma — Agreement or Anarchy," Kennedy discussed the history and significance of standards in the television industry and the role played by institutions like the RTS and the SMPTE.

About HDTV, he said, "HDTV has the interest of the U.S. government and industry, and all are diligently working on a suitable path to follow. The same is true here in Europe with the Eureka 95 project.

This certainly will require standards, both voluntary and mandatory. In a global television environment, national standards that are not compatible with the national standards of others will make program exchange and live television coverage difficult and expensive.

"The goal of a single, world HDTV production standard is a very desirable one, and if we could pass the transition period and reach the time when our present NTSC, PAL, and SECAM standards are no longer a consideration because all production and delivery is in HDTV, then the benefits of a single worldwide standard would certainly be worth all the pain to accomplish it. Some have called this the Electronic Holy Grail. It is my personal opinion that it is no longer possible . . .

"Standards are in most cases voluntary, and challenges to existing standards will continue just as we see a continued advancement in technology. Even though we may not be pleased with some of these

challenges, they do keep us on our toes. The ultimate decision rests with the marketplace and the products purchased in that marketplace. The days of the quad recorder as a single common format are gone forever. Multiple formats will continue to be used in the professional television market. The role of the standards organization now is to document these formats and, where possible, work to reduce the number by bringing similar formats into a single format . . ."

In conclusion, Kennedy said, "In my preceding remarks, I have painted a complex picture of overlapping and seemingly incompatible standards, thus a semblance of the anarchy I referred to in the title of this lecture. That is, however, a misleading conclusion to draw from the actual current situation with standards. Standards organizations cannot guarantee that a single television scanning rate, signal, or tape format will emerge to satisfy all applications for all users. The constant forward march of technology, which seems to be accelerating, brings us new standards to replace the old, and often, as we have seen with HDTV or digital VTRs, a multiplicity of such standards. Political pressures on standards organizations and the engineers who work on the committees seem to me to be on the increase. This is most unfortunate.

"What the standards organizations are able to do well in the face of this anarchy is to find large plateaus of agreement where indeed a tape made on a D-1, D-2, or S-VHS machine in one area will replay perfectly on its commensurate machine somewhere else. That, in fact, represents the agreement part of my title, and acknowledges the bulk of the positive activities of all the well-meaning and hardworking individuals from all over the world who are members of television standards committees.

"There is, today, far more agreement than anarchy in global standards, and if we do end up with more than one international EDTV or HDTV standard, perhaps the best solution is to also come up with the best possible standards converter."



M. Carlos Kennedy (left) accepts a plaque from the Duke of Kent naming him a fellow of the Royal Television Society.

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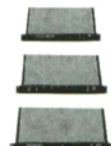
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film formats and video systems of today and tomorrow. Sondor technology is a world of unlimited options: the modular design provides optimal flexibility and versatility. Sondor's highly qualified specialists will evaluate, design and install a ready-to-go studio-system to suit your individual requirements – with a complete system warranty.

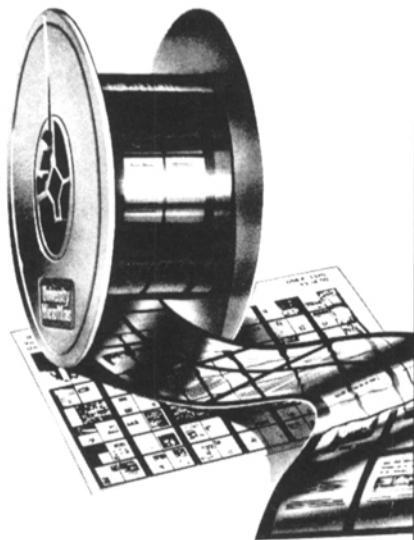


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A **Call for Papers** has been issued for the Eighth International Conference on Video, Audio, and Data Recording, to be held April 23-26, 1990, at the University of Birmingham, England. The conference will provide an international forum to consider recent advances in all aspects of recording technology.

Some suggested topics are recording media, heads, and transducers; the theory of recording processes; optical, magnetic, and solid-state recording; recording techniques and hardware; analog and digital systems and applications; coding, modulation, and signal processing; mass information storage and retrieval; consumer applications; competing techniques; and standards. This is a nonexclusive list; papers on other related topics are welcome. Interested authors should submit synopses by June 30, 1989, to the Institution of Electrical Engineers, Savoy Place, London WC2R OBL, England.

**The Fourth International Conference on Television Measurements** will be held June 20-22, 1991, in Montreux, Switzerland. Papers will be sought in the fields of cable television, terrestrial television broadcasting, and direct broadcasting by satellite. The conference is scheduled close to the dates of the biennial Montreux International Television Symposium to make it more convenient for overseas delegates to attend. For further information, contact the Institution of Electrical Engineers, Conference Services, Savoy Place, London WC2R OBL, England.

**The SPSE's 42nd Annual Conference** was held May 14-19, 1989, at the Marriott Hotel in Boston, Mass. The technical program included approximately 150 papers. Highlights of the conference were the general session, chaired by Stephen R. Sofen, Polaroid Corp., and the honors and awards plenary session, at which recipients of the 1989 SPSE awards for scientific achievement spoke on the subjects of their choice. In addition to the technical papers presented, there were five half-day tutorials and one full-day tutorial.

**JVC Professional Products Co.** was named the 1988 Manufacturer of the Year by the International Communications Industries Association (ICIA). The award was presented to JVC for its introduction of S-VHS technology, which, as the citation reads, "provided users, especially those in the television industry, with a high-quality, low-cost, and reliable format."

The citation continued, "JVC not only filled a significant gap in the market, but also caused the video industry as a whole to look ahead and begin serious preparation for the 1990s." Ken Nishioka accepted the award on behalf of JVC.

**Karl Paulsen** was appointed vice president of engineering for Digital Post & Graphics. Paulsen, a specialist in digital and component technology for video, will be the chief architect of the company's expansion plans, which call for the addition of the latest hardware and software for the Quantel Paintbox/Harry/Encore system and a Sony D-1 videotape recorder.



Paulsen, a manager of SMPTE's Pacific/Northwest Section, was most recently the chief engineer of KTZZ-TV.

**Neil E. Neubert** has been named the manager of engineering at JVC Professional Products Co. Neubert will be responsible for the technical evaluation of products as well as the study and analysis of engineering and design-related technical issues.



Before this appointment he was the product manager for JVC's S-VHS and MII professional video products.

**Jeffrey Clarine** has been appointed central region sales manager for LDL Communications, Inc. He will be responsible for the sale of LARCAN television transmitters and Alan Dick antenna systems in the central U.S. Clarine was formerly with Phillips Broadcast and BTS Broadcast Systems and has been responsible for direct and indirect sales of a range of broadcast equipment.



**Austin Basso** has been named the Americas sales and marketing manager for Tektronix's television division. He will coordinate U.S. television sales and marketing activities with Tektronix subsidiaries in Canada, South America, and Mexico. Basso has been with Tektronix for 23 years and has worked exclusively with television customers. He was instrumental in developing the professional video dealer program and implemented worldwide distribution programs for Tektronix and the Grass Valley Group.

