

Report of the 1991 Meetings of IEC TC60 and Subcommittees SC60A and SC60B

Singapore, June 24–29, 1991

By **Frederick M. Remley**

Technical Committee 60 – Recording, one of the standards committees operating under the auspices of the International Electrotechnical Commission (IEC), met from June 24 to June 29, 1991, in Singapore, the capital city of the Republic of Singapore. This was the first IEC Technical Committee meeting to be held in Singapore, and the recently founded Singapore Institute of Standards and Industrial Research (SISIR) served as host for the occasion, assigning a number of energetic and helpful SISIR staff people to work with the delegates in preparing meeting agendas, typing and duplicating documents, and performing myriad other helpful tasks. The Electronic Industries Association of Japan (EIA-J) and the Japanese National Committee for IEC generously provided both organizational skill and financial assistance to Singapore. The cooperation between these organizations was a week of work that was well organized, well coordinated, and quite productive. Excellent meeting facilities were arranged at the Omni Marco Polo Hotel in downtown Singapore.

A group of 55 delegates from 13 countries attended the meetings of TC60 and its subcommittees SC60A – Audio Recording and SC60B – Video Recording. TC60 is chaired by Henry Zahn of Germany, and the committee secretary is Kurt Herrmann of The Netherlands. SC60A is chaired by Wilhemus Andriessen of Germany, with Ludo Stulens of Belgium as secretary. SC60B is chaired by Frederick Remley of the

U.S., with Rolf Müller of Germany as secretary.

A technical tour of SISIR headquarters and the SISIR Electronic Test Center was featured on one day, together with a visit to the large videocassette recorder (VCR) factory of International Video Products, a joint venture of Thomson (France) and Toshiba (Japan). This plant currently accounts for about 5% of the worldwide production of VHS-format VCR machines. It is very modern, and the factory management is oriented toward implementation of the total quality management (TQM) structures advocated by the eminent American statistician and management consultant, W. Edwards Deming.

The responsibilities of the parent Technical Committee, TC60, consist in part of coordinating the efforts of SC60A and SC60B with the work of other IEC TCs and with the work of other international standards bodies such as the ISO and CCIR, together with overseeing a subcommittee charged with developing suitable international terminology for recording technology. In addition, in Singapore, discussions about streamlining the work of TC60 and the subcommittees were of high priority. A new strategic policy statement for the TC was drafted during the meetings. This statement reaffirms the scope of TC60 as “Standardization in the fields of audio and video recording, with accompanying data, in analogue and/or digital form on disks, non-perforated magnetic tapes, optical and solid state recording media. This includes the specific characteristics of the media necessary to ensure interchangeability, as well as related methods of measurement and terminology.” The statement goes on to describe the

present technological environment as one with growing audio and recording businesses and thus growing requirements for standards work. The trends in recording technology are seen as being characterized by a shorter life for both professional and consumer recording formats, a crossover of consumer technology into professional work, and a continuing emphasis on magnetic tape accompanied by growing interest in both magnetic disk and optical disk technology.

In addition, TC60 provided a forum for the discussion of ways to improve the organizational efficiency of its subcommittees. Both Subcommittees 60A and 60B decided to organize their future work in audio and video standardization on the basis of task forces charged with specific projects, project schedules, and deadlines. The secretaries of the SCs will carry most of the burden of reorganizing the work along these lines.

The American National Standards Institute (ANSI) supplies secretariat support to the U.S. National Committee for IEC, and so ANSI is the funnel through which documents are supplied to advance the work of TC60 and the other IEC technical committees.

The current work of SC60A is focused primarily on digital audio tape (DAT) and compact disc (CD) audio recording technologies. ANSI provides input to SC60A about these technologies by passing on the standards work done by the Audio Engineering Society (AES). Reference to the *AES Journal* is recommended for readers wishing more details on the matter of sound recording standards.

ANSI supplies SC60B with input documents and casts votes on IEC ballots using information from the

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standards work on video recording performed by the SMPTE Television Recording and Reproduction Technology (TRRT) Committee. The U.S. delegation to this meeting of SC60B consisted of five persons who have been active in SMPTE engineering committee work: Koichi Sadashige, consultant; Richard Wilkinson, Optical Disk Corp.; Charles Spicer, NBC Television Network; Charles Mecca, WEA Manufacturing; and Fred Remy, University of Michigan.

The work of SC60B was divided into three main categories: professional recording formats, consumer recording formats (including videodiscs), and video recording measurements (including magnetic tape measurements). Progress was made in each of these areas, as is briefly summarized below.

Consumer recording formats (Working Group 5). Existing videodisc standards were updated and work was begun on a variety of videodisc measurement techniques. In the case of VCR formats, amendments incorporating recent improvements were approved for the IEC standard defin-

ing the S-VHS format and for the standards describing 8mm-format highband video recording and the 8mm FM audio system. Work continued on detailed measuring methods and calibration tapes for all kinds of nonbroadcast VTRs and for measurements of combined camera-recorder systems.

Professional recording formats (Working Group 7). Revision of the documents describing the Type D-2 digital composite recording format was approved using recommendations supplied by SMPTE. Both Betacam and M-2 analog component format documents were updated and approved for balloting as IEC standards. The incorporation of corrections and updates to the text of the IEC Type-C format specification, proposed by the SMPTE, was approved for future work and approval was given to a comprehensive revision of the IEC document describing the characteristics of tape reels used for video recording systems. In addition, the working group will begin to study HDTV video recording formats with the expectation that standards in this field will be

required within the next few years.

Measuring methods for video recording (Working Group 3). Measuring methods for broadcast VTRs and calibration tapes for broadcast formats were discussed and draft documents approved for circulation. National Committees are asked to submit digital measurement recommendations for both component and composite recording formats.

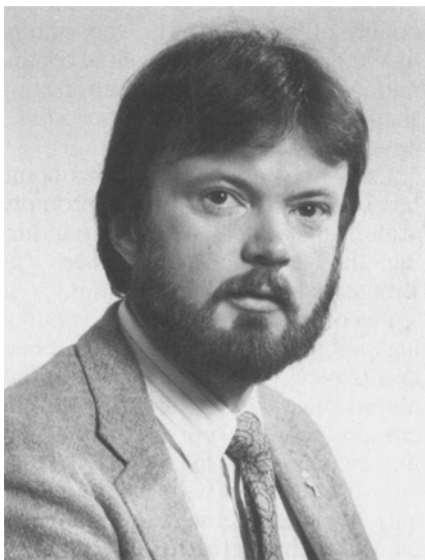
The IEC listing of sources for reference tapes for video recording formats was brought up to date and augmented.

Overall, a significant quantity of work was accomplished in the short period of little more than four actual working days. The general feeling of the delegates seemed to be that even more progress will be possible when the new project-oriented approach to video recording standardization is fully implemented and task forces are empowered to work on the standards documents in the interim periods between Technical Committee meetings.

The next meeting of TC60 and its subcommittees will occur in October 1992, in Rotterdam.

Biographical Sketch

Sections Vice-President John Carlson



John Carlson

An early interest in film and a knack for mechanics has taken SMPTE Sections Vice-President John Carlson a long way. The vice-president of Monaco Labs and Video has a career path that is paved with interests he developed during his childhood.

"I became interested in a film career as a result of my early fascination with movies," Carlson recalls. "In particular, a film called *The Loved One* was an inspiration for me. It is a macabre movie that stars Jonathan Winters and Rod Steiger. The lighting, camera angles, and special effects helped to provoke my interest in the field."

His mechanical skills stem from model railroading, a hobby he has had since he was five years old. "Model railroading taught me not to fear elec-

tricity and that whatever I took apart, I could usually put back together.

"There is a logic and problem-solving side to toys in general that has always fascinated me," he continued. "Having a father who was a toy buyer for a large department store helped immensely. Running a film-to-tape machine or an optical printer and playing with trains or toys have a lot in common, including a degree of whimsy and gamesmanship."

Education

Carlson, who hails from Milwaukee, pursued his interest in film at the University of Wisconsin — in a very diverse manner. "While I was doing my undergraduate work I found a loophole in the course book; if any area is fully represented in many de-