Table I. A Scale of Representative *Peak* Acceleration Values, Computed from Film Records of Several Cutterbar Designs. Variety: Amsoy; moisture content: 9–10%.

Cutting situation	Acceleration (g)
1. *Reciprocating cutterbar* (500 cycles/min)	
(a) Maximum blade acceleration for reciprocating knife as a slider crank mechanism	21.4
(b) Point on stem near cutterbar following contact with ledger	210
2. *Continuous chain cutterbar* (600 ft/min[a] [183 m/min])	
Point on stem near blade of chain cutterbar, during contact with blade	572
3. *Centrifugation*	
10% of pods shattered at 9.9% moisture content	295
4. *Impact cutting*, 7,500 ft/min (2,287 m/min)	
(a) Point on stem near blade	21,420
(b) Point on stem 3/4 in from blade (data in Fig. 7)	15,530
5. *Impact cutting*, 10,000 ft/min (3,049 m/min)	
(a) Point on stem near blade	23,700
(b) Point on stem 4 in from blade, near pod–stem junction	14,200
(c) Cutting 3/16-in-diam dowel, point near blade	35,300

[a] At a given blade speed, variations in the profile of the counteredge and blade angle were observed to have an effect on the ability of the knife to initiate cutting and on the degree of sliding at the blade, but the trajectory of the plant after severance was not markedly affected by the counteredge shape or blade angle.

associated cutting tests and proved uniquely suited to the analysis of motion of unconstrained crop material influenced by cutting elements in harvest simulation.

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SMPTE Technical Conference & Equipment Exhibit

New York, 17-22 October 1976

Program Developments

Program Chairman Paul Wittlig, CBS TV Network, announced the appointment of three new topic chairmen. The first, C. Robert Paulson, AVP Communications, Westborough, Mass., will handle the topic of Labor in a Changing Technology. The session will be a panel discussion moderated by James Lippke, Editor of *Broadcast Management/Engineering*. He will be joined by leaders from both union and management to discuss how best to deal with and provide for changing educational requirements, skills and talents.

Wittlig's second appointment is Dom Capano, Cinecraft International, Inc., who will be in charge of equipment papers. Papers in the session will describe new technological developments in motion-picture and television equipment, with emphasis on the equipment shown at the SMPTE Equipment Exhibit.

Wittlig's third topic chairman appointment is Dr. Roderick T. Ryan, Eastman Kodak Co., who will provide a session of "Early Landmark Films." These will illustrate certain technological developments of Motion Pictures, Sound and Television. Among the films planned are *La Cucaracha*, the first film presented in the Technicolor three-color imbibition process, and *1,2,3,4, Testing*, the first showing of a film presentation by Earl I. Sponable on early photographic sound developments by Fox/Case (circa 1924-1927). Also planned is an audio and visual history of videotape-to-film recording.

Wittlig pointed out, regarding television aspects of the program, that studio and outside pickup production as well as post production will be covered extensively. This will include ENG equipment and techniques but with emphasis on future developments and refinements, making this simpler and less expensive type of operation more applicable to the production of documentaries and commercials. According to Wittlig, papers will also be presented on satellites, videodisc technology and fiber optics. A group of papers on the engineering aspects of the Canadian Olympic coverage is also planned.

New Hotel Arrangements Chairman Appointed

Arrangements Chairman Ed Messina, American Broadcasting Co., announced the appointment of Rodney Jones, Eastman Kodak Co., as Hotel Arrangements Chairman. He replaces Fred Nobbs of Kodak who was transferred out of New York.

Equipment Exhibit

Exhibit Chairman Charles Ahto, Tape-Films, Inc., reports that more than 57 companies have signed up for exhibit space. This will undoubtedly be the largest SMPTE Equipment Exhibit ever held in New York City. As of mid June, the companies who have signed up for exhibit space are listed below.

Ampex Corp., Audio-Video Systems Div.
Arriflex Co. of America
Belden Communications, Inc.
Bell & Howell Co., Prof. Equip. Div.
Berkey Colortran, Inc.
The Camera Mart, Inc.
Canon USA Inc.
Christie Electric Corp.
Cinema Products Corp.

Cine 60 Inc.
Consolidated Video Systems, Inc.
Datatron, Inc.
Eastman Kodak Co.
Ecam Company
Ehrenreich Photo Optical Industries, Inc.
Electro-Voice, Inc.
Elmo Mfg. Corp.
F&B/Ceco, Inc.
Filmthings
Frezzolini Electronics Inc.
Frigidheat Industries
General Electric Co., Lamp Bus. Div.
General Enterprises, Inc.
General Rayfin Ltd.
Goldberg Bros.
GTE Sylvania
Hazeltine
Karl Heitz, Inc.
Honeywell, Inc.
Image Devices, Inc.
International Video Corp.
KLM Associates, Inc.
Laumic Co., Inc.
LaVezzi Machine Works, Inc.
Lowel-Light Mfg., Inc.
L.T.M.
L-W International
MM Editing Systems, Inc.
Magnasync/Moviola Corp.
Magna-Tech Electronic Co., Inc.
Matthews Studio Equipment, Inc.
Micro Consultants, Inc.
Mole-Richardson Co.
Motion Picture Enterprises, Inc.
Multi-Track Magnetics, Inc.
Nagra Magnetic Recorders, Inc.
Norton Associates, Inc.
O'Connor Engineering Laboratories, Inc.
Plastic Reel Corp. of America
Publishers For Conventions, Inc.
Recortec, Inc.
Research Technology, Inc.
Rosco Laboratories Inc.
Sony Corp. of America
Stellavox Corp. of America
Super8 Sound, Inc.
3M Co., Magnetic Audio/Video Prod. Div.
Westrex

International Standardization
Paris, May 1976

By ALEX E. ALDEN, Staff Engineer

Paris in the spring was a most appropriate choice for the Ninth Plenary Meeting of the ISO Technical Committee 36 on Cinematography. During the week of 17 May 1976, 58 motion-picture specialists from 14 countries met at excellent facilities provided by the French standardization association (Association Française de Normalisation) to consider the many problems emanating from the ever expanding international exchange of motion-picture materials.

The delegates were given a warm welcome by Monsieur Raymond Frontard, Director General of AFNOR, who hosted the meeting.

ISO (International Organization for Standardization) is a worldwide specialized organization for standardization and is the largest of the many international voluntary groups for industrial and technical cooperation. ISO brings together the interests of standards producers and those of standards users by the preparation of International Standards. Its work covers virtually every area of technology; the major exception is electrotechnical questions, which are the responsibility of ISO's affiliated organization, the International Electrotechnical Commission (IEC).

A nongovernmental organization, ISO and its standards have no legal force. However, more than half its members — the official standards bodies of 63 countries — are governmental agencies or bodies incorporated by public law.

ISO has approximately 152 technical committees and more than 1300 subcommittees and working groups. It has established over 3000 International Standards, nearly half of which were published since 1969. These figures continue to grow in proportion to its expanding scope and activity.

The origin of ISO can be traced as far back as 1926 when the International Federation of National Standardizing Associations (ISA) was constituted. The 20 member countries which comprised the association laid the foundation for international cooperation in the field of standardization. In 1942, the work of the association ceased officially and was resumed by the United Nations Standards Coordinating Committee (UNSCC). Valuable contributions to the war effort were made by the groups who did much to further international standardization. UNSCC members and representatives of other nonmember standardizing bodies met in London in October of 1946 and unanimously adopted the ISO Constitution and Rules of Procedures.

Technical Committee 36 on Cinematography

TC 36 activities began in 1952 with its first meeting. Since that date, the committee has met regularly at approximately three-year intervals:

1952 — New York City (Oct. 1952 *Journal*, pp. 351-355)
1955 — Stockholm (Feb. 1956 *Journal*, pp. 102-107)
1958 — Harrogate (Jan. 1959 *Journal*, pp. 32-37)
1961 — Garmisch-Partenkirchen (Jan. 1962 *Journal*, pp. 32-37)
1965 — Milan (Dec. 1965 *Journal*, pp. 1112-1116)
1967 — Moscow (Nov. 1967 *Journal*, pp. 1113-1115)
1971 — London (Oct. 1971 *Journal*, pp. 832-833)
1973 — Williamsburg (Feb. 1974 *Journal*, pp. 134-136)
1976 — Paris

Actions by this committee have resulted in the acceptance of 63 International Standards in the field of motion pictures.

TC 36 consists of 18 Participating Member Bodies, 12 Observer Member Bodies and 10 Liaison Organizations.

Participating Member Bodies

Australia	France	Poland
Belgium	Germany	Sweden
Bulgaria	India	Switzerland
Canada	Italy	United Kingdom
Czechoslovakia	Japan	USA
Denmark	Netherlands	USSR

Observer Member Bodies

Austria	Iran	Romania
Chile	Mexico	South Africa
Greece	Pakistan	Spain
Hungary	Portugal	Yugoslavia

Liaison Organizations

ISO Technical Committee 42, Photography
ISO Technical Committee 46, Documentation
ISO Technical Committee 73, Consumer Questions
IEC Technical Committee 60, Recording
Council for Mutual Economic Assistance (CMEA)
European Broadcasting Union (EBU)
International Commission on Illumination (CIE)
International Radio and Television Organization (OIRT)
International Telecommunication Union (ITU)
International Radio Consultative Committee of ITU (CCIR)