

ceptable). A form of image-motion compensation used primarily in ballistic photography, in which the recording medium (i.e., film) is moved in approximate coincidence with the optical image.

time-lapse photography: a motion-picture technique used to achieve a time magnification of less than unity. The original exposures are made at a frame rate slower

than normal and are then projected at the normal rate. The result is an apparent speed-up of the original action.

time resolution: the ability of an instrument or technique to measure time. The smallest time interval that can be measured by use of a given recording system.

very-high-speed photography: photography in which picture-taking rates range from

10,000 to 1,000,000 frames per second, writing rates range from 10^{-1} to 10 mm per microsecond, or exposure times range from 10^{-7} to 10^{-5} seconds.

ultra-high-speed photography: photography in which picture-taking rates exceed 1,000,000 frames per second, writing rates exceed 10 mm per microsecond, or exposure times are less than 10^{-7} seconds.

Segmented Helical VTR Standards Group Holds Second Meeting

At the SMPTE Winter Conference held in San Francisco in late January, the need to resolve the problems of proliferating one-inch tape formats was attacked by the SMPTE Committee on Video Recording and Reproduction Technology. Two working groups were organized to concentrate separately on segmented and non-segmented (head-per-field) machine designs. The groups are composed of representatives of VTR and tape manufacturers and major broadcast and non-broadcast industry users.

The segmented-helical working group held its second meeting at PBS headquarters in Washington, D.C. on March 21, under the Chairmanship of PBS Associate Director of Technical Op-

erations, L. Merle Thomas. Bosch-Fernseh representative Rolf Crummenauer presented and described the electrical and mechanical specifications of the BCN one-inch helical format proposed to the SMPTE working group for standardization. The format is being considered commercially by several manufacturers including IVC, Philips and RCA. Meeting discussions focused on details of defining the format specifications.

It is SMPTE policy not to issue interim reports or tentative specifications resulting from meeting discussions. At an early date, however, this working group plans to have a draft standards proposal available for evaluation and comment by interested parties.

Standards & Recommended Practices

Approved SMPTE Recommended Practices

On 27 January 1977, the Society's Board of Governors approved the following SMPTE Recommended Practices: RP 71-1977, Setting Chromaticity and Luminance of White for Color Television Monitors Using Shadow-Mask Picture Tubes; and RP 72-1977, Specifications for an Illuminator of Test Pattern Transparencies for Television Studio Cameras. Copies of SMPTE Recommended Practices are available from Society Headquarters for \$1.00 each.

Approved International Standard

The International Organization for Standardization (ISO) approved an International Standard which is published here for your information. ISO 4238-1976, Cinematography — Optical Printing Ratios for Enlargement and Reduction of Motion-Picture Film Images — Specifications, is in accord with USA practices as specified in SMPTE Recommended Practices RP 65-1976 and RP 66-1976.

Copies of all International Standards are sold through the American National Standards Institute, 1430 Broadway, New York, NY 10018.

ISO is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. The International Standard published here was developed by Technical Committee 36 on Cinematography. The work of this committee is administered by the Engineering Department of the SMPTE

which functions as the secretariat in ANSI's name. The report of the last meeting of the committee was published in the June 1976 *SMPTE Journal*.

Withdrawn American National Standards

On 4 February 1977, the American National Standards Institute approved the withdrawal of seven American National Standards: PH22.44-1963 (R1969), Specifications for 16-mm Multifrequency Test Film, Photographic Type; PH22.45-1962 (R1969), Specifications for 16-mm 400-Cycle Signal-Level Test Film, Photographic Type; PH22.57-1963 (R1969), Specifications of 16-mm Buzz-Track Test Film, Photographic Type; PH22.67-1960 (R1969), 1,000-Cycle Balancing Test Film for 35-mm Motion-Picture Sound Reproducers; PH22.68-1962 (R1969), Specification for Buzz-Track Test Film for 35-mm Motion-Picture Sound Reproducers, Photographic Type; PH22.132-1963 (R1969), Specifications of 16-mm 400-Cycle Signal-Level Test Film, Perforated IR-3000, Magnetic Type; and PH22.140-1965 (R1969), Specifications for 16-mm Multifrequency Test Film, Perforated One Edge, Magnetic Type.

Withdrawal action was initiated because all standards specifying test materials are being transformed into SMPTE Recommended Practices. SMPTE Recommended Practices RP 67-1976 and RP 68-1976 have replaced PH22.57 and PH22.68, respectively. The other standards are being transformed by the Committee on Audio Recording and Reproduction Technology. — Alex E. Alden, *Manager of Engineering Services*.