

Engineering News

SMPTe Television Engineering Committees meet in Pasadena, CA

SMPTe Engineering committees met at the Pasadena Convention Center on February 28 to March 4, 2005.

The committees that met over the five-day period included the Television Recording and Reproduction Technology (V16); Television Systems Technology (S22); Television Image Technology (I23); Video Compression Technology (C24); Metadata and Wrapper Technology (W25); File Management and Networking Technology (N26); Data Essence Technology (D27); Television Audio Technology (A29); and the Registration and Identification Technology (R30).

SMPTe Engineering Vice-President Peter D. Symes, thanked Digital Cinema Initiatives, LLC; Dolby Laboratories, Inc.; the Entertainment Technology Center; Pixar Animation Studios; and Warner Bros. for the digital cinema presentations at the Pacific Theater in Hollywood, which included a digital screening of the Pixar Oscar-winning animation movie, *The Incredibles*, on March 1, 2005.

The next series of meetings will be held in Sydney, Australia, July 11-15, 2005. The Australian Film Television & Radio School will serve as host.

—Carlos V. Girod, Jr., P.E., Director of Engineering

SMPTe Standards News

The new April 2005 Television, Motion-Picture and Digital Cinema CD-ROM is now available, with over 500 SMPTe standards, recommended practices, and engineering guidelines (Volume TV15-MP8). Please see www.smpte.org/smpte_store/standards/ to order.

All SMPTe documents are now on one CD-ROM; we no longer publish separate television and motion-picture CD-ROMs. A flyer is available at www.smpte.org/smpte_store/standards/pdf/TV15-MP8_Flyer.pdf.

Digital Cinema and HDTV test materials are available at www.smpte.org/smpte_store/test_materials/. These are the DCI/ASC Mini-Movie and require a separate user license.

1. New final approved documents (November 2004-March 2005)

- SMPTe 7-2004, Motion-Picture Film (16mm)—Camera Aperture Image and Usage
- SMPTe 41-2004, Motion-Picture Film (16mm)—Prints—Photographic Audio Records
- SMPTe 96M-2004, Television—35- and 16mm Motion-Picture Film—Scanned Image Area
- SMPTe 97-2004, Motion-Picture Film (16mm)—200-Mil



William C. Miller (r) chaired his final S22 meeting and introduced the incoming chair of S22, Birney D. Dayton (l).



Peter D. Symes (l) thanks William C. Miller (r), retiring chairman of the Committee on Systems Technology, S22, for his years of service.

- Edge Position—Magnetic Audio Record
- SMPTe 112-2004, Motion-Picture Film (16mm)—100-Mil Magnetic Audio Record
- SMPTe 119-2004, Motion-Picture Film (70mm)—Perforated 65mm KS-1870
- SMPTe 145-2004, Motion-Picture Film (65mm)—Perforated KS
- SMPTe 151-2004, Motion-Picture Film (8mm Type S)—16mm Film Perforated 8mm Type S (1-3)
- SMPTe 166-2004, Motion-Picture Film (8mm Type S)—Exposure Control and Stock Identification—Sound and Silent Camera Cartridge Notches
- SMPTe 170M-2004, Television—Composite Analog Video Signal—NTSC for Studio Applications
- SMPTe 173-2004, Motion-Picture Equipment (8mm Type R)—Double 8mm Camera Spools—100-Ft Capacity
- SMPTe 210M-2004, Motion-Picture Film (16mm)—Magnetic Audio Records—Two Records on 16mm Magnetic Film
- SMPTe 231-2004, Motion-Picture Film (8mm Type R)—Camera Aperture Image and Usage
- SMPTe 239-2004, Motion-Picture Film (16mm)—Perforated 8mm Type R, 2R
- SMPTe 274M-2005, Television—1920 x 1080 Image Sample Structure, Digital Representation and Digital Timing Reference Sequences for Multiple Picture Rates
- SMPTe 299M-2004, Television—24-Bit Digital Audio Format for HDTV Bit-Serial Interface
- SMPTe 308M-2004, Television—MPEG-2 4:2:2 Profile at High Level

SMPTE 310M-2004, Television—Synchronous Serial Interface for MPEG-2 Digital Transport Stream

SMPTE 315M-2004, Television—Camera Positioning Information Conveyed by Ancillary Data Packets

SMPTE 323M-2004, Motion-Picture Film Channel Assignments and Levels on Multichannel Audio Media Representation of a Single Item

SMPTE 401M-2005, Television—Extended Content Control Information (ExCCI) Data Packet

SMPTE 405M Television—Material Exchange Format (MXF)—Elements and Individual Data Items for the MXF Generic Container System Scheme 1

SMPTE 409M-2005, Digital Television Recording—12.65mm Type D-16 Format

RP 77-2004, Specifications for Azimuth Test Film for 35mm Studio Audio Reproducers, Magnetic Type

RP 81-2004, Specifications for Scanning-Beam Uniformity Test Film for 16mm Motion-Picture Photographic Audio Reproducers

RP 82-2004, Specifications for 16mm Projector Alignment and Screen Image-Quality Test Film

RP 90-2004, Specifications for Type U Audio Level and Multifrequency Test Film for 16mm Audio Reproducers, Magnetic Type

RP 127-2004, Specifications for Type U Audio Level and Multifrequency Test Film for 35mm Studio Audio Reproducers, Magnetic Full-Coat Type

RP 130-2004, Dimensions of Tape Splices on 16mm and 8mm Type R Motion-Picture Film, Projection Type

RP 135-2004, Use of Binary User Groups in Motion-Picture Time and Control Codes

RP 142-2004, Stereo Audio Track Allocations and Identification of Noise Reduction for Video Tape Recording

RP 143-2004, Specifications for Type U Audio Level and Multifrequency Test Film for 35mm Striped Four-Track Release Print Audio Reproducers, Magnetic Type

RP 145-2004, SMPTE C Color Monitor Colorimetry

RP 178-2004, Serial Digital Interface Checkfield for 10-Bit 4:2:2 Component and 4fsc Composite Digital Signals

RP 183-2004, Monitoring and Diagnostics Processors

RP 184-2004, Specification of Jitter in Bit-Serial Digital Systems

RP 185-2004, Classification of Projection Depth of Focus

RP 199-2004, Mapping of Pictures in Wide-Screen (16:9) Scanning Structure to Retain Original Aspect Ratio of the Work

RP 201-2004, Encoding Film Transfer Information Using Vertical Interval Time Code

RP 225-2005, Registered Private Information in KLV

EG 27-2004, Supplement Information for SMPTE 170M and Background on the Development of NTSC Color Standards

EG 33-2004, Jitter Characteristics and Measurements

EG 34-2004, Pathological Conditions in Serial Digital Video Systems

2. Documents in final publication process (None)

3. Documents in trial publication (None)

4. Documents that completed trial publication (October 2004-March 2005 in chronological order)

SMPTE 409M, Proposed SMPTE Standard for Digital Television Tape Recording 12.65mm Type D-16 Format

SMPTE 313, Proposed Revision of SMPTE 313-1999 SMPTE Standard for Motion-Picture Film (65mm)—Manufacturer-Printed Latent Image Identification Information—120 Perforation Repeat

SMPTE 305M, Proposed Revision of SMPTE 305.2M-2000 SMPTE Standard for Television—Serial Data Transport Interface

SMPTE 381M, Proposed SMPTE Standard for Television—Material Exchange Format (MXF) Mapping MPEG Streams into the MXF Generic Container

SMPTE 274M, Proposed Revision of SMPTE 274M-2003, Proposed SMPTE Standard for Television 1920 x 1080 Image Sample Structure, Digital Representation and Digital Timing Reference Sequences for Multiple Picture Rates

RP 226, Proposed SMPTE Recommended Practice D-Cinema Audio Channel Mapping and Channel Labeling

RP 207, Proposed Revision of RP 207-2002 SMPTE Recommended Practice Transport of Program Description Data in Vertical Ancillary Data Packets

RP 224.6, Proposed Revision of RP 224 SMPTE Recommended Practice Labels Registry

SMPTE 389M, Proposed SMPTE Standard for Television—Material Exchange Format (MXF)—MXF Generic Container Reverse Play System Element

SMPTE 394M, Proposed SMPTE Standard for Television—Material Exchange Format (MXF)—System Scheme 1 for the MXF Generic Container

SMPTE 405M, Proposed SMPTE Standard for Television—Material Exchange Format (MXF)—Elements and Individual Data Items for the MXF Generic Container System Scheme 1

5. Documents archived—the following documents were archived November 2004-March 2005

SMPTE 165-1999 (Archived 2004), Motion-Picture Film (35mm)—Perforated 8mm Type S, 5R (1-3-5-7-0)

SMPTE 176-1999 (Archived 2004), Motion-Picture Film (8mm Type S)—16mm Film Perforated 2R-1667 (1-3)—Magnetic Striping

SMPTE 206-1998 (Archived 2004), Motion-Picture Equipment (8mm Type S)—Model 1 Sound Camera Cartridge—Aperture, Profile, Film Position, Pressure Pad, and Flatness (200-Ft Capacity)

SMPTE 240M-1999 (Archived 2004), Television—1125-Line High-Definition Production Systems—Signal Parameters

SMPTE 277M-1996 (Archived 2004), Television Digital Recording—19mm Type D-6—Helical Data, Longitudinal Index, Cue, and Control Records

SMPTE 278M-1996 (Archived 2004), Television Digital

Recording—19mm Type D-6—
Content of Helical Data and Time
and Control Code Records

RP 32-1995 (Archived 2004), Specifications for 8mm Type S Test Film for Projectors and Printers Reel Spindles

RP 49-1995 (Archived 2004), Leaders for 8mm Type R and S Motion-Picture Release Prints Used in Continuous-Loop Cartridges

RP 50-1995 (Archived 2004), Dimensions for 8mm Type S Motion-Picture Projector Reel Spindles

RP 51-1995 (Archived 2004), Screen Luminance and Viewing Conditions for 8mm Review Rooms

RP 54-1999 (Archived 2004), Edge Numbering on 16mm Release Prints

RP 58-1995 (Archived 2004), Nomenclature for Devices Enclosing 8mm Motion-Picture Film for Projection

RP 59-1999 (Archived 2004), Color and Luminance of Review Room Screens for Viewing Motion-Picture Materials Intended for Slides or Film Strips

RP 64-1999 (Archived 2004), Specifications for Audio-Focusing Test Film for 35mm Audio Reproducers, Photographic Type

RP 79-1999 (Archived 2004), Specifications for Flutter Test Film for 35mm Four-Track Striped Release Print Audio Reproducers, Magnetic Type

RP 92-1995 (Archived 2004), Specifications for Audio Level and Multifrequency Test Films for 8mm Type S Audio Reproducers, Magnetic Type

RP 103-1995 (Archived 2005), Care, Storage, Operation, Handling, and Shipping of Magnetic Tape for Television

RP 109-1994 (Archived 2004), Spectral Response of Photographic Audio Reproducers for 8mm Type S Motion-Picture Film

RP 114-1994 (Archived 2004), Dimensions of Photographic Control and Data Record on 16mm Motion-Picture Film (R1999)

RP 206-1999 (Archived 2005), Opportunistic Data Flow Control Using Ethernet as a Control Channel in an MPEG-2 Transport Emissions Multiplex

EG 7-1994 (Archived 2004), Audio Sync Pulse for 8mm Type S Cameras, Magnetic Audio Recorders, and Re-recording Projectors

EG 8-1993 (Archived 2004), Specifications for Motion-Picture Camera Equipment Used in Space Environment



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EG 1-1990 (Archived 2004), Alignment Color Bar Test Signal for Television Picture Monitors

6. Documents withdrawn (None)

7. New proposals (None)

8. New work items (Please see www.smpte.org/engineering_committees/ for details.)

- SMPTE Sets up Study Group on Image Formatting
- SMPTE Sets up Study Group on Display Technologies
- SMPTE Sets up MXF Implementers Working Group

9. Requests for technology/information (RFT/I)

SMPTE Releases Request for Information on Lip Sync Issues (Please see www.smpte.org/engineering_committees/ for details.)

10. Corrigenda (None)

As a reminder, the engineering website is at www.smpte.org/engineering_committees/.

Standards including CD-ROMs may be ordered at www.smpte.org/smpte_store/standards/.