

News

SMPTÉ Television Engineering Committees Meet in Mountain View, CA

SMPTÉ Television Engineering committees met at the Microsoft Conference Center in Silicon Valley on December 6-10, 2004.

The Committees that met 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); Registration and Identification Technology (R30).

The new work item in C24 concerning the Microsoft-introduced Proposed Standard—VC-1 Compressed Video Bitstream Format and Decoding Process continues to move forward. Updated reference decoder and bit-streams software (Version 2, December 7, 2004, CD2R1) was made available at the meeting upon completion of an end-user license agreement and payment of a \$250 US media distribution fee. Licensees of the first version received the second version at no additional charge.

The next series of meetings will be held February 28-March 4, 2005, in Los Angeles, CA, at a site to be determined.

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

Bill Miller Appointed Chairman of the ATSC Technology Group on Distribution (T3)

The board of directors of the Advanced Television Systems Committee, Inc. (ATSC) have appointed William Miller, general manager, digital television planning and standards, ABC-TV Broadcast Operations and Engineering division, to be the chairman of the Technology Group on Distribution (T3). Miller has been active in industry standards work on several fronts for many years. His service with ATSC started in 1986, and over the years, he has served as chairman of a number of subcommittees, most recently T3/S6, the Audio and Video Coding Specialist Group.

“We are fortunate to have Bill Miller as chairman of our Technology Group,” said ATSC President Mark Richer. “Bill’s



Dr. Ingo Hontsch, IRT, chairs the Committee on Video Compression Technology, C24.



Patrick Griffis, Senior Director, Worldwide Media Standards, Microsoft Windows Client Division (I) is thanked by Hans Hoffmann, SMPTÉ Engineering Director of Television, for serving as host of the five-day series of meetings.



The committee at work.

extensive experience in the development of technical standards for the television industry will be a great benefit for the ATSC.”

“The Technology Group is the part of ATSC that writes standards and recommended practices for broadcasters, and its chair is a key ATSC position,” said Bob Rast, ATSC Chairman. “Bill has been tested and proven through years of service, is a great choice, and we all look forward to his continuing contributions.”

A stalwart member of SMPTÉ for over 15 years, Miller chairs the organization’s Television Systems Technology Committee and actively participates in most of the Society’s other engineering committees. Additionally, he serves on the Board of Editors of the *SMPTÉ Motion Imaging Journal*. He was Engineering Vice-President of SMPTÉ from 1996 to 2001, during which time he represented SMPTÉ on the Executive Committee of the ATSC. A SMPTÉ Fellow, he was honored with the Society’s Progress Medal in 2002.

On his appointment to chairman of the T3, Miller said, “ATSC brings together companies from all sectors of the industry to focus on holistic solutions for digital television. This diversity is ATSC’s greatest strength and I look forward to participating, to an even greater degree, in the development of the standards that drive the future of digital television.”

DTS Acquires Lowry Digital Images

Digital Theater Systems, Inc., (DTS) has acquired Lowry Digital Images (LDI), a privately held company and a leader in image restoration and enhancement. This transaction substantially extends DTS' business to include image technology and services that support content creation and delivery in both the theatrical and consumer markets.

A Burbank, CA,—based technology developer and service provider, LDI is a leader in restoring and enhancing moving pictures, whether captured on film or in digital form. LDI uses highly advanced, proprietary image processing algorithms designed to improve picture quality and resolution and to remove unwanted artifacts. Since its inception in 2000, LDI has processed nearly 100 of the world's most recognized feature films for output to broadcast television, DVD, 35mm film, and IMAX presentations.

The acquisition positions DTS to expand its role as an essential technology provider for high-quality audio and video entertainment.

Sony Improves Recording Accuracy and Compatibility for DVD Media

Sony Electronics has developed a new technology in recordable DVD media with the introduction of AccuCORE, which delivers an enhanced level of recording accuracy, compatibility, and reliability. The technology uses a new recording dye for both the DVD-R and DVD+R format variations in order to deliver optimal performance in writing and playback across a wide variety of drives and recorders. Improved writing stability and faster addressing is achieved through a new stamper design, new molding, and new bonding technologies.

Sony's new 16x DVD-R and DVD+R media marks the first new product introductions to feature AccuCORE, which will also be implemented in the company's 8x recordable DVD products.

Consumers recording on discs with AccuCORE technology are expected to appreciate five key benefits: wider compatibility for DVD-R and DVD+R recordings with various types of drives or recorders at various speeds; faster addressing of the DVD-R format in high-speed dubbing and time-shift playback applications; stable writing capabilities for both DVD-R and DVD+R formats through reduced disc vibrations at high speeds; greater temperature adaptability for optimal performance during extended burning processes for all (DVD-R/-RW and DVD+R/+RW) formats; and improved archival reliability for long-term storage, also for all formats.

Takuo Miyagishima Receives the Gordon E. Sawyer Oscar

Takuo Miyagishima, a notable design engineer in the motion picture industry, was awarded the Gordon E. Sawyer Award by the Board of Governors of the Academy of Motion Picture Arts and Sciences at the Academy's Scientific and Technical Awards Dinner on Saturday, February 12, 2005, at the Regent Beverly Wilshire Hotel

Established in 1981, the Sawyer Award is "presented to an individual in the motion picture industry whose technological contributions have brought credit to the industry." Miyagishima is the 18th recipient.

Having worked at Panavision for nearly 50 years, Miyagishima has been influential in developing and designing new technologies that are unique and innovative advancements in the field of cinematography. In 1991, he was honored with the Fuji Gold Medal, an award recognizing his design of the single autofocus anamorphic camera lens. He received both a Technical Achievement Award and a Scientific and Engineering Award from the Academy in 1998 (with Albert Saiki) for the design and development of the Eyepiece Leveler and the mechanical design of the Primo Lens Series, respectively. He also won an Emmy Award for the Lens Series in 2001. Miyagishima was also the 1999 recipient of the Academy's John A. Bonner Medal of Commendation.

A longtime member of both the Academy and SMPTE, Miyagishima has served on numerous film technology committees for both organizations including the Academy's new Science and Technology Council.

Academy Awards for Scientific and Technical Achievements

Academy Awards for Scientific and Technical achievements for the 2004 year were presented to the following:

Academy Award of Merit (Oscar Statuette)

Horst Burbulla for the invention and continuing development of the Technocrane telescoping camera crane. With its electronically driven leveling head, adjustable moveable weight carriage, and lightweight, extremely precise telescoping beam elements that allow camera movement during shots, the Technocrane has redefined the state-of-the-art in camera crane technology.

Jean-Marie Lavalou, Alain Masseron and David Samuelson for the engineering and development of the Louma Camera Crane and remote system for motion picture production. The Louma pioneered a remotely operated camera head combined with a lightweight and portable modular crane. Its design has proved to be the inspiration for numerous subsequent remote camera systems.

Scientific and Engineering Awards (Academy Plaque)

Gyula Mester (electronic systems design) and Keith Edwards (mechanical engineering) for their significant contributions to and continuing development of the Technocrane telescoping camera crane. With its electronically driven leveling head, adjustable moveable weight carriage, and lightweight, extremely precise telescoping beam elements that allow camera movement during shots, the Technocrane has redefined the state-of-the-art in camera crane technology.

Lindsay Arnold, Guy Griffiths, David Hodson, Charlie Lawrence, and David Mann for their development of the Cineon Digital Film Workstation. Cineon pioneered a commercial node-graph compositing system establishing a new visual method for direct manipulation of the compositing process, which influenced and defined modern digital compositing workflows.

Technical Achievement Awards (Academy Certificate)

Greg Cannom and Wesley Wofford for the development of their special modified silicone material for makeup applications used in motion pictures. This proprietary modified silicone makeup system allows for the creation of either partial or full-face appliances for motion picture makeup effects that move like real flesh, have translucency similar to skin, and will accept standard makeup materials.

Jerry Cotts for the original concept and design and Anthony Seaman for the engineering of the Satelight-X HMI Softlight. With its large radiating surface and thin profile, this collapsible, self-contained HMI softlight provides a diffuse light to simulate daylight in location interiors, where space is often limited.

Steven E. Boze for the design and implementation of the DNF 001 multiband digital audio noise suppressor. Designed in the early 1990s when digital signal processing was in its early stages, the realtime digital approach of the DNF 001 provided accurate filter response with minimal interaction, allowing noise attenuation with fewer artifacts.

Christopher Hicks and Dave Betts for the design and implementation of the Cedar DNS 1000 multiband digital noise suppressor. The Cedar DNS 1000 is specifically designed to reduce background noise from the recorded motion picture dialogue. With its precise filters it allows the frequency ranges to be altered or even cascaded to pinpoint and reduce the offending noise.

Nelson Tyler for the development of the Tyler Gyroplatform boat mount stabilizing device for motion picture photography. As a pioneer in this area of motion picture technology, Tyler's 2-axis, hydraulically powered camera mount successfully eliminates the pitch and roll associated with camera shots taken from a boat in the water.

Julian Morris, Michael Birch, Paul Smyth, and Paul Tate for the development of the Vicon motion capture technology. Vicon Motion Systems developed special-purpose cameras for motion capture with software systems that maximized their impact on the motion picture industry.

John O. B. Greaves, Ned Phipps, Antonie J. van den Bogert, and William Hayes for the development of the Motion Analysis motion capture technology. Motion Analysis Corporation developed special-purpose cameras for motion capture with software systems that maximized their impact on the motion picture industry.

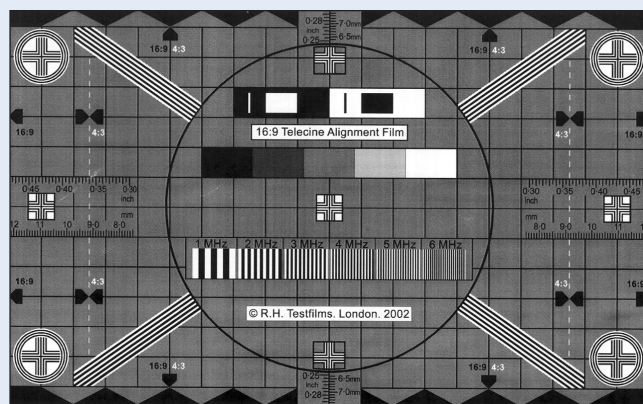
Nels Madsen, Vaughn Cato, Matthew Madden, and Bill Lorton for the development of the Giant Studios motion capture technology. The software solution created by Giant Studios applied a unique biometric approach that has influenced the development of motion capture technology for motion pictures.

Alan Kapler for the design and development of Storm, a software toolkit for artistic control of volumetric effects.

New Super 16mm Post-Production Test Material

Unique, because it is possibly the only Super 16 test material available, the Super 16mm Telecine Alignment Film, Revision 3 from BKSTS, is now available through the SMPTE Test Materials Department. Its primary use is to evaluate the quality of telecine or film scanner output. A secondary use is as a quality control target carried through the various stages of post-production. Its principal features are:

- Main image size and position conforming to specifications in the ANSI-SMPTE 201M standard for Super 16mm as well as DIN 15602- part 7.
- Calibrations for the 16:9 images required for wide screen television.
- Subsidiary calibrations for 4:3 pan-scan operations.
- Astigmatism patches for assessment of gate performance.
- 1 MHz to 6 MHz frequency grating for resolution analysis.
- Gray scale for assessment of color balance.
- High-contrast patches for assessment of long-term and short-term streaking.
- Circles and diagonals for checking geometry and interlace.
- Linearity squares.



For 16 x 9 widescreen television use, calibrations are provided to correspond to EBU R86, and SMPTE 96M specifying maximum safe area to be scanned on Super 16mm film. Calibrations are shown in inch as well as metric dimensions. Complete descriptions and instructions for use come with the Super 16mm film.

For order forms and pricing information contact Anne Seminara at the SMPTE Test Materials Department. Phone: (914) 761-1100, ext. 113 or aseminara@smpte.org. Alternately, for order forms and technical details contact Ed Schuller, Test Materials Advisor for SMPTE's New York Section at (516) 676-3895 or seaviews@att.net.