

## Mark Hyman's Chairmanship of IEC TC100 Extended

The International Electrotechnical Commission (IEC), based in Geneva, Switzerland, has extended Mark Hyman's chairmanship of IEC TC100 to September 10, 2010. Hyman, SMPTE staff engineer, has been the Chair of IEC TC100: Audio, Video, and Multimedia Systems and



Equipment since 2001. This committee actively produces standards in a number of technical areas for the consumer electronics industry, including terminals for video and data services and content, digital systems interfaces and protocols, cable networks for television and interactive services, color measurement, moderate and higher data rate storage, and two newly-developed areas on multimedia home server systems and e-publishing and e-book.

## ATSC Approves New Transport Stream Verification Recommended Practice

The Advanced Television Systems Committee (ATSC) has given final approval to the ATSC Recommended Practice: Transport Stream Verification (A/78). The new Recommended Practice provides guidance to broadcasters and equipment manufacturers on a common methodology to be used to determine transport conformance with the elements and parameters of ATSC Standards A/53, "ATSC Digital Television Standards," and A/65, "Program and System Information Protocol for Terrestrial Broadcast and Cable."

Although ATSC standards strictly define the contents and characteristics of the DTV emission transport stream, there may be a number of interactions and interrelationships among various components. Successful tuning and display of programs can be ensured if the transport stream adheres to the applicable specifications.

## 2K Digital Cinema Camera Streamlines Movie and HD Production

Silicon Imaging, along with CineForm and Intel Corp., has unleashed a 2K digital cinema camera system set to revolutionize movie and HD production. The Silicon Imaging SI-2K will shoot footage directly to disk, at either 1920 x

1080P HD or 2048 x 1152 cinema resolutions running on motherboards integrated into the camera, or on laptop computers powered by Intel Core 2 duo processors. Captured footage is instantly editable using CineForm's Prospect 2K realtime visualization and colorization software. Afterwards, finished projects can be directly encoded for theatrical distribution to digital cinemas or on-demand internet download.

Unlike modern HD cameras, which develop and compress images as uncompressed raw "digital negatives" over a standard gigabit Ethernet connection, an Intel Core 2 Duo processor-based computer embedded in the camera or tethered to a laptop up to 300 ft away, processes the digital negatives, where they are non-destructively developed and colorized for preview using the cinematographer's desired "look" for the scene. The digital negatives and look metadata are simultaneously recorded to a 2.5-in. notebook hard drive using the CineForm RAW visually perfect codec. Up to 4-hr of continuous footage are captured on a single 160 Gbyte notebook drive; this is the equivalent of 14-reels of 35mm film, which has an associated cost exceeding \$25,000 for materials and processing.

## National Academy of Television Announces Broadcast Tech Emmy Award Winners

The National Academy of Television Arts & Sciences has announced the winners of its Science, Technology & Engineering Emmy Awards for Broadcast Television.

Technology & Engineering Emmy Award winners include: RCA for Pioneering Development of On Screen Display (OSD) for Setup, Control and Configuration of Consumer Television Equipment; *Microsoft, Adobe, Real and Apple* for Streaming Media Architectures and Components; *Terayon Communication Systems* for Pioneering Development for Combining Multiple Transport Streams Which Are Already Encoded, Using Rate-Shaping and Statistical Re-multiplexing; *Visible World and Weather Channel* for Development and Implementation of Automatically Assembled Dynamic Customized TV Advertising; *Gennum* for Technology Advances in Serial Digital Interface Solutions, Enabling Over 20 Years of Seamless Studio and Broadcast Infrastructure Migration; and *Rene Anselmo of PanAmSat*, for Privately Owned and Operated International Satellite Company Primarily for International Video Services.

The awards will be presented at the opening evening event of the International Consumer Electronics Show (CES) on Jan. 8.

## CableLabs Enables UpdateLogic to Provide Software Update Delivery Service to Digital Cable Devices

Cable Television Laboratories Inc., (CableLabs) and UpdateLogic, Inc., have agreed to allow software updates to be delivered to digital cable devices, including digital television sets. Through the agreement, the cable industry will work with UpdateLogic to enable so-called "in-band" distribution of software updates over cable networks. The software update is transmitted as data in-band within PBS channels across the U.S. UpdateLogic will modify the tech-

nology behind its UpdateTV software update service to be compatible with the CableLabs specifications and to offer UpdateTV to the consumer electronic industry.

UpdateTV automates the distribution of software patches and updates directly to digital television receivers at no cost to the consumer. Compatible with the OpenCable Common Download specification and the ATSC A/97 Software Data Download Standard, UpdateTV provides a ubiquitous method to proactively update digital television software without user intervention.

## Modulus Video and Sencore Expand Partnership with OEM Agreement

Modulus Video and Sencore, Inc., have formed a partnership in which Modulus Video will expand its MPEG-4 AVC product family with the introduction of the MD3187A—a complete multiformat modular receiver decoder family

based on Sencore's MRD3187 system. The MD3187A is fully interoperable with Modulus Video's complete line of the industry's most bandwidth efficient MPEG-4 AVC encoding products for high-definition (HD) and standard definition (SD) video, including the new ME2000 multiformat AVC encoder family. The combination of products provides a fully optimized point-to-point distribution solution to meet a wide range of broadcast distribution needs, including direct to the home (DTH) operations, backhaul, transmission monitoring, and more.

Under the alliance, Modulus Video will distribute the MD3187A through its worldwide network of distribution partners. The MD3187A supports up to two independent MPEG-2 4:2:0/4:2:2 or MPEG-4 AVC decoders. With its eight available I/O slots, the MD3187A can be configured either as a single-eight slot or as two independent four-slot systems. Available interfaces include DVBS2, COFDM, DVB-CI, and IP.

## IBC 2006 A Brief Recap

The IBC 2006 Conference and Exhibition was held at the Amsterdam RAI in the Netherlands from September 8 to 12, 2006.

SMPTE, one of the six partners of IBC (IEEE, Royal Television Society, IABM, SCTE, and the IET—A new institute from the IEE and IIE), held its annual reception on Sunday evening, September 10, at the RAI Convention Center.

The IBC Partnership Village area was also a meeting point for SMPTE members attending the conference and provided an opportunity for attendees to inquire about both technical and membership information.

The conference program titled "The World of Content Creation and Management Delivery," addressed the needs of the content industry, with sessions on the creative, business, and technical aspects of content creation management. Topics included Multimedia in the Networked Home, HDTV Lift-Off, Media on the Move, Content Production, IPTV, and D-Cinema.

The first day of sessions addressed multimedia in the home, digital rights management, and HDTV. Panel discussions included network platforms—broadcast or broad-based, platform services and devices, and digital rights management. These topics examined IPTV and broadband internet, their differences, and possible advantages. The issue of whether DMB, DVB-H, or WiMax would become the technology for delivery of mobile multimedia content and delivery of that media in the home environment was also addressed. Also included on the first day, was a tutorial on video display technology, chaired by *David Bancroft* of Thomson, U.K. This session addressed the numerous changes over the last decade, as LCD, plasma, and DLP devices have replaced CRT technology. Topics included color gamut, and the contrast range needed to achieve consistent quality control.

The second day's lineup included HDTV in the European market, with a number of sessions on technology, business challenges, and content issues. Studio equipment technology and affordable large-screen displays for the consumer, were addressed, along with issues relating to 1080p. International HD content interchanges were among the major discussion points. There was also a tutorial addressing multimedia on the move, which focused on content in the success of mobile multimedia systems, describing how it is created, converted, and repurposed. An important ongoing issue is the ownership and copyright of that content.

Topics on day three included content production, rights and usage of television archives, broadcast archives in the digital world, and the building of new mobile television technologies. *Clyde Smith* of Turner Broadcasting, chaired a session on content production, which focused on the trend of file-based production workflows in the broadcast/media markets. Discussions included system automation and control and the overall workflow management and solutions for higher storage capacity, together with system bandwidth and protocols for delivery of large media files.

On the last two days, sessions included content production and protection, producing content for multiple distribution channels such as SDTV, HDTV, broadband, mobile, and podcasting.

A hot topic on the program was IPTV—the transmission of television signals using internet protocol and the medium over which it is transmitted. In one session, it was stated that "the future has arrived." A report was also presented on the possibilities for both interactive and targeted services.

The Conference Exhibition included over 800 companies showcasing the latest technology and foremost business ideas in broadcasting and media.

—Mark S. Hyman