

Microsoft and Universal Pictures Collaborate to Release HD DVD Titles Using VC-1 and iHD

Microsoft Corp. and Universal Pictures announced their collaboration on the release of next-generation HD DVD disks using VC-1, the video compression standard recently approved by SMPTE and one of the mandatory codecs in the HD DVD specification. Universal will also use iHD for the interactive features of the new titles. The launch of HD DVD players and titles in the U.S. represents the first broad market availability of high-definition optical media for consumers.

As part of Universal's initiative to provide new digital entertainment experiences for consumers using the best solutions available, the studio is using VC-1 for its initial HD DVD titles, including *Serenity*, *Doom*, *Apollo 13*, *The Bourne Supremacy*, *U-571*, *Van Helsing*, and many more. Given the lower bit rate required with VC-1 to deliver pristine 1080p, high-definition movies, Universal will have room to spare within HD DVD's 30 Gbyte capacity for interactive features and other extras. With iHD, the studio is offering interactive menus that are overlaid on top of the movie and accessible without interrupting playback. Additional features, such as user-defined bookmarks that stay with the title, picture-in-picture commentaries, and network access to download new features and HD movie trailers, all access standard HD DVD features (secondary video decoder, network access and persistent storage).

In addition to the Universal titles using VC-1, currently 100% of all the shipping HD-DVD titles from other studios in the U.S. are using the VC-1 codec as well.

Harris Corp. to Acquire Aastra Digital Video

Harris Corp. has signed an agreement to acquire Aastra Digital Video, a business unit of Aastra Technologies Limited. Aastra Digital Video develops and markets video

SMPTE Engineering Committees Meet in Ontario, Canada

The SMPTE Television Engineering Committees held quarterly meetings on June 5-9, 2006, hosted by Gennum Corp. in Burlington, Ontario, Canada.

Attended by over 60 representatives from the manufacturer and end-user communities, the committees met over five days, addressing numerous standards issues, which included activities in Television Audio (A29) on packing audio metadata in VANC packets; closed captioning in the Data Essence Committee (D27); ongoing discussions relating to display technologies in the Image Technology Committee (I23); and lip sync and data exchange in the Systems Committee (S22).

Items in the Television Compression Committee (C24) included intra-frame compression constraints and compression schemes. An archive management type interchange was discussed in the Committee on Video Recording Technology (V16). The File Management and Network Committee (N26) is currently completing documentation on 10 Gbit/sec and 3 Gbit/sec interfaces. There was also continuation of work on metadata and MXF in the Wrapper and Metadata Technology Committee (W25).

A Niagara wine tour and dinner was the social highlight of the week.

The next round of meetings are scheduled for September 13-17, 2006 at the European Broadcasting Union (EBU) in Geneva, Switzerland.

Ninety Years of Setting the Standards that Drive Motion Imaging!

Ninety years ago in July, several individuals met in Washington, D.C., and unanimously decided to create a society of motion imaging engineers to organize a yet unorganized and growing industry. They drafted a constitution and named the group's driving force, inventor, and engineer C. F. Jenkins, as chairman.

Some background on what set up the need for this society might help. In the early 1900s, the soon-to-be motion picture industry was unorganized, lacking structure and leadership. Equipment was built differently according to each manufacturer, and standard practice was nonexistent.

At the same time, a world war was threatening, and the army saw a need for motion pictures for training and recording military events. The U.S. government attempted to bring order to this burgeoning industry by creating a body to lead development in motion pictures. The government looked to an inventor from Washington, D.C., named C. F. Jenkins to chair the organization. Jenkins had developed the first motion picture projector in 1895, along with Thomas Armat, as well as several unique imaging devices, such as an underwater camera, and a panoramic camera for aerial views.

After two unsuccessful attempts at starting this organization, Jenkins met with two of his close colleagues to discuss a solution. Jenkins, E. K. Gillett, and N. I. Brown gathered on the boardwalk of Atlantic City one day during the spring of 1915. They discussed past failures to generate an organized group to lead the motion picture industry, while recalling the successes of other engineering societies.

One year later, in July of 1916, the three men along with seven additional engineers met in Washington, D.C. A unanimous decision was made to create a society of engineering specialists in the motion picture field. A constitution was then created, and Jenkins was named chairman of the Society of Motion Picture Engineers (SMPE).

In October 1916, the group ratified the constitution, established committees, and elected Jenkins as president.

In October 2006, SMPTE is planning to celebrate this milestone at its Technical Conference and Exhibition in Hollywood, with a museum exhibit, an anniversary party, and other events planned to celebrate the occasion. Join us as we commemorate SMPTE's 90th anniversary! Stay tuned for more information on SMPTE's website, and here in the *Journal*.

networking, encoding, decoding, and multiplexing technologies used by television broadcasters, telecommunications providers, and satellite networks. The heart of their product portfolio is the VideoRunner multiservice video networking system.

Based in Bridgewater, N.J., with approximately 35 employees, Aastra has supplied Harris with video networking products for the past eight years. Aastra's customers also include Turner Broadcasting, the National Football League, DirecTV, Bell Canada, and the Canadian Television Network (CTV).

"This acquisition adds to our total content delivery solutions for the broadcast industry and will enable Harris to offer networking products that transport media content over a variety of broadcast, cable, satellite, and telco networks, including those supporting new services such as IPTV and Mobile TV," said Tim Thorsteinson, president of Harris Broadcast Communications Division.

Panasonic and Sony Develop New HD Digital Video Camera Recorder

Panasonic and Sony Corp. announced specifications for AVCHD, a new HD digital video camera recorder format, jointly established by the two companies.

The AVCHD is an HD digital video camera format for recording 1080i1 and 720p2 signals onto 8-cm DVD media. The format employs MPEG-4 AVC/H.264 codec for video compression, and Dolby Digital (AC-3) or linear PCM for audio codec. This makes it possible to develop HD video camera recorders, which achieve compact size as well as high-quality video and audio. The MPEG-4/H.264 codec is a promising technology, which is over two times more efficient than MPEG-2 or MPEG-4 codec technologies.

Coupled with the emerging growth of HD broadcasting across the world, penetration of HD-capable TV sets is gaining unprecedented momentum. This sets the stage for enjoying HD images more easily at home. Panasonic and Sony will extensively promote this format throughout the industry as the new HD digital video camera recorder format best-suited for the HD era.

JVC Professional and Duart Join to Create Digital Den

JVC Professional Products Company and DuArt Film & Video announced the creation of The Digital Den at DuArt, a complimentary service and resource center for filmmakers and post-production specialists. The Digital Den offers filmmakers technical consultation on their digital projects, including camera options and settings, workflow analysis, and the opportunity to screen their works-in-progress on a JVC Digital Cinema projection system.

The advent of low-cost HD acquisition has created a myriad of exciting but often confusing options for filmmakers—making access to reliable information and expertise more important than ever.

Coming in the September Issue!

Progress Reports
including updates from the SMPTE Technology Committees, reports on the current state of technology, and more.

Arthur W. Allison III Awarded 2006 Bernard J. Lechner Award

Arthur W. Allison III was honored as this year's recipient of the Bernard Lechner Outstanding Contributor Award. The presentation was made in Chantilly, VA, at the Westfields Marriott, during the Advanced Television Systems Committee (ATSC) Annual Meeting held on May 10, 2006.

Allison served as the chair of the Implementation Subcommittee from 1997 to 2004. Under his leadership, the Implementation Subcommittee helped the industry address real-world DTV implementation issues including technical challenges such as the implementation of PSIP and captioning, lip sync, and the postage stamp effect. The initial work of the Implementation Subcommittee led to important standards development work in ATSC, CECA, and SMPTE.

Allison is the director of advanced engineering in the Science & Technology Department of the National Association of Broadcasters. He joined NAB in September 1995, and his responsibilities include technical issue management with a focus on policy and technical developments of advanced television systems. He is also a member of SMPTE.

Sci-Tech Application Requests in the Mail for 79th Academy Awards

Officially launching the 79th Academy Award season, the Academy of Motion Picture Arts and Sciences has mailed over 850 applications requests forms to individuals and companies representing the scientific and technical community in the U.S. and abroad.

Those specializing in science and technology in film, including past winners will have the opportunity to be considered for awards in those areas. In order to be considered, achievements must demonstrate exceptional merit and evidence of having provided significant advancements in the production of motion pictures.

Submissions to the Scientific and Technical Awards Committee will be evaluated by the main committee as well as subcommittees composed of distinguished engineers, scientists, and craftspersons before being recommended to the Academy's Board of Governors for award consideration. The application filing deadline is Tuesday, August 1, 2006. For information and application packets visit www.oscars.org.