

# Section Meetings

## Hollywood November 2006

The Hollywood Section meeting on November 14 was a joint session with the American Society of Cinematographers (ASC). Held at the Academy of Motion Picture Arts and Sciences Linwood Dunn Theater, the attendance was the largest of any Hollywood Section meeting, with 252 people attending. Six members of the visiting China SMPTE group attended, including Secretary-General Zheyang Chu.

Prior to the presentations, a reception, sponsored by Kodak and ASC, was held in the theater lobby.

Titled "How Many Ways Can You Count Your Ks?," the program began with a 1926 film presentation (through the miracle of the talking picture) of George Eastman greeting a meeting of the Society of Motion Picture Engineers at the Eastman Kodak Co., in Rochester, NY. Section Chair Patricia Keighley then greeted the audience and announced upcoming programs.

Section Manager Dick May followed with a film clip presentation on the topic "For the First 100 Years, All We Had Was Film," and ran short segments of features made in 1933, 1948, and 1969. Each was photographed with different film technology (black-and-white, Technicolor, Eastman Color).

Siegfried Heep, Modern VideoFilm, then gave a PowerPoint presentation titled "What Is a Pixel?," which explained the



Sieg Heep addresses the audience.



Howard Lukk and Daryn Okada presented "The Other Project."

basics of digital imaging for those not particularly familiar with the technology.

Daryn Okada, president of the American Society of Cinematographers, discussed the factors to consider when choosing film or digital capture devices. Differences affect budget, schedule, lens and camera specs, technical support on-site, and other related factors.



Patricia Keighley greets the audience.

Howard Lukk of Walt Disney Pictures discussed the use of a safe image area for digital production and post-production, which was accompanied by PowerPoint illustrations. This was followed by a digital showing of *The Other Project*, a 13-minute movie commissioned by Disney, comparing film capture with the same subjects photographed using four different makes of digital cameras. During this screening, the digital cameras used for each section were identified only with a letter designation, so the manufacturers were not apparent; Daryn Okada narrated. The next section included brief presentations by representatives of each of the digital cameras used in *The Other Project*. They included Arri, Dalsa, Sony, and Thomson Grass Valley. Manufacturers were invited to present camera updates that have occurred since the shooting of *The Other Project*, one year ago.

The movie was shown once again, with 35mm film projection, and no sound. Before this screening, the various camera manufacturers were matched with their letter designation to be publicly identified for the first time. This screening allowed for side-by-side comparison of each of the four digital cameras with the film capture on a scene-by-scene basis. The meeting concluded with a Q&A session, led by Howard Lukk and Daryn Okada, and closing remarks from Patricia Keighley.

Sieg Heep's presentation is available on the Hollywood Section's website: [www.hsmpte.org](http://www.hsmpte.org). Instructions on how to access it are posted there.—Richard P. May, Section Manager

## Hong Kong November 2006

It was a temperate late autumn day and over 200 people attended the annual technical seminar titled "DTV and D-Cinema—The Final Frontier," held at UA Cinema in Tai Koo Shing on Hong Kong Island.

Al Barton, vice-president of digital cinema technologies, Sony Pictures Entertainment, provided an update on the development of digital cinema technology and the relation-

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ship between HD production and digital cinema convergence. Shunichi Fujioka, content creation products marketing division manager, Sony Corp. of Hong Kong, continued by elaborating on the hardware that would contribute to content creation. He stressed the importance of hardware interchangeability and the common platforms that the industry aims at achieving.

With the hardware of content production ready, output devices are crucial to truly reproducing high-quality production, and this topic was covered by Takashi Hayasaka, general manager of the digital cinema business department, Sony Corp. of Hong Kong. He discussed the new development of 4K digital cinema projector technology.

Following an information update on hardware, Man Nang Chong, founder and CEO of GDC Technology, shared his experience on the business model of digital cinema multiplex, a new concept and multifunction venue that needs to sustain its comparatively large initial investment in the digital cinema projector and server setup.

The topic then shifted to the delivery of HD signals to the home, via digital television. Peter Chu, principal engineer, transmission network, Television Broadcasts (TVB), demonstrated live transmission of HD materials via TVB's Temple Hill transmitter to Tai Koo Shing. The demonstration successfully showed the high-quality picture and sound that can be delivered by the new terrestrial digital television network.

Another hot topic for discussion was IPTV. Professor



Over 200 participants attended the annual seminar.



Kozo Tetsuya, division managing director, Sony Corp. of Hong Kong Ltd., delivered the welcome speech at the anniversary dinner.

Xiaobu Luo, a consultant from the Management Case Centre of Beijing University, discussed the business model of IPTV and its pros and cons. He pointed out that cost-effectiveness was the most prominent factor in deciding whether a technology could be successful in the long run and concluded that IPTV as a technology-driven business has to take a customer-centric approach, or it will be a failure. Hiroshi Tango, founder and president of Frontiers, demonstrated a live transmission of HD over IP and highlighted the trend of HD over IP for the past two years. He indicated that HD over IP could be a very cost-effective way for raw HD materials as well as program delivery.

Finally, Victor Tsang, principal of Shatin Nexus of the Hong Kong Institute of Vocational Education (IVE), delivered a short speech on the establishment of the SMPTE student chapter in Hong Kong, and the ongoing cooperation between SMPTE and IVE.

The seminar was followed by a dinner, where SMPTE members and guests continued to exchange views and share their experiences.—*Raymond Lai, Secretary/Treasurer*

## New York October 2006

Approximately 55 members and guests met at Tambarelli Digital's facility in midtown Manhattan for a presentation on "Active Format Description—Its Importance, Characteristics, and Applications." The speakers included William Miller, general manager of DTV planning and standards for ABC/Disney, and Jean-Claude Kreliec, product manager at Miranda Technologies.

Miller presented his paper, "Canceling the Postage Stamp," which was originally presented at NAB 2006. The term "postage stamp" refers to a 16 x 9 video converted to 4 x 3, and then re-converted to 16 x 9, but with bars across the top and bottom as well as the sides of the picture. Active Format Description (AFD) is a data set specifically formulated to prevent the occurrence of the postage stamp, as well as other unwanted results of cascaded format conversions. Miller gave an overview of the data structure of AFD for both 16 x 9



(L-R): William C. Miller, ABC; John Ferder, CBS, Past New York Section Chair; Marge Janssen, Tambarelli Digital; and Jean-Claude Kreliec, Miranda Technologies.



(L-R): Matthew Goldman, Mike Strein, and Stephane Billat, speakers at the New York Section meeting in November.

and 4 x 3 material and explained how this data is inserted in the VANC of the video. He also discussed the progress of the S22 Television Systems Technology Committee's working group toward developing and approving the standards for AFD, bar data, and pan/scan. It is important for broadcasters, distributors, and content creators to implement AFD in order to pass through the content creator's intent, facilitate single-link distribution, and provide the best quality content to the end viewers.

M. Kreliec described how AFD technology is being integrated into the Miranda product line, for example, how AFD detection, reaction, and insertion are incorporated into their up-, down-, and cross-converters. He also discussed AFD applications in studios, dub rooms, edit suites, and ingest facilities. He described how Miranda has assisted NBC with their installation of AFD equipment in their studios in New York. He then gave a demonstration of AFD and aspect ratio conversion, using Miranda equipment, a HDCAM-SR deck, and a 1/2-in. SD VTR.

A very thorough Q&A session followed, which included questions on latency issues, server and compressor support of AFD, MPEG-stream splicing, and the future implementation of AFD in set-top boxes.

The New York Section is grateful to Tambarelli Digital for again providing space the meeting, and to Miranda for sponsoring the refreshments and participating in the program.—*John Ferder, Past Section Chair*

## New York November 2006

The November meeting, which was held at the New York Hilton, was titled "Advanced Video Compression Technologies." Speakers from Tandberg Television and Evertz Microsystems combined to present unique points of view on this topic.

First, Matthew Goldman, vice-president of compression systems for Tandberg Television outlined the fundamental processes of both MPEG-2 and MPEG-4 (H.264 or AVC) and compared/contrasted the improvements inherent in MPEG-4. Goldman included video still frames, with which he

showed compression at various data rates in both methods, and explained the typical artifacts and how MPEG-4 can take advantage of new processes to reduce artifacts.

Next, Stephane Billat, product manager at Evertz Microsystems, gave an overview of JPEG-2000 and its targeted applications and contrasted the performance vs. bit rate for JPEG-2000, MPEG-2, and MPEG-4.

Both speakers were very engaging, and members left with a new appreciation for these compression formats.

The meeting was also attended by Kimberly Maki, SMPTE's new Executive Director. Maki introduced herself between speakers and was warmly received. Approximately 65 people were in attendance.—*Mike Strein, Program Manager/Television*

## Ohio September 2006

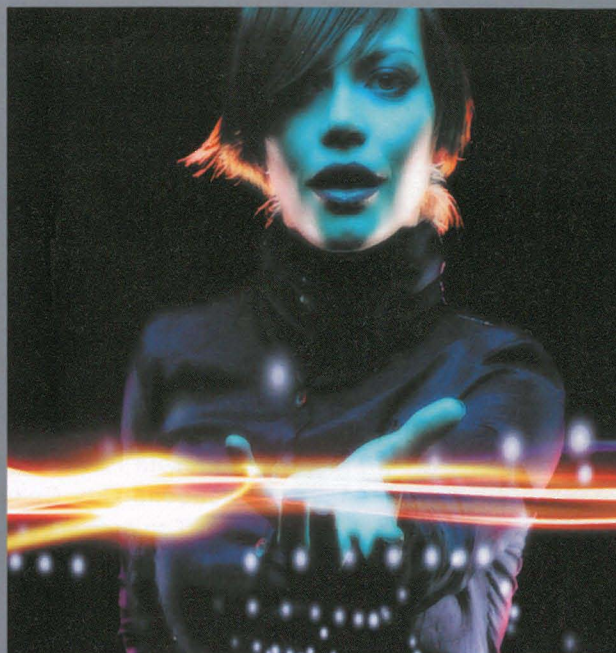
The meeting on September 14 was combined with the central Ohio SBE Chapter 52. The main topic for the evening was the U.S./FCC broadcast mandated 2 GHz relocation project. The guest speaker was John Owen, senior manager of spectrum resources for the Sprint/Nextel Corp. Owen has implementation responsibilities for the nation as well as the Central Ohio region. Although this area is progressing well, he pointed out that nationally the overall project is running about one year behind. Owen also gave an update on his disaster relief briefings for the local TV broadcaster that stressed the necessity of having a comprehensive plan of action for station personnel to follow, and on very short notice.—*Gene L. Batey, Secretary/Treasurer*

## Pasadena City College November 2006

Doug Johnson, director of operations for Southern California Public Radio 89.3 FM KPCC, was the guest speaker at the chapter meeting. KPCC's broadcast studio is located on the Pasadena City College campus and has a staff of 80. Formerly known as KPCS when it started in 1957, the station's format is news and information. The target demographic is adults in their 50s.

Johnson, a Pasadena City College alumnus, has been with the station since 1983. He explained its growth and transformation from early infancy to its rising maturity and current role as one of Los Angeles' main players as a public radio station. Johnson noted that in such a competitive market, where they have to compete with five other public stations, they must output "a more commercial sound" than the average public station to stay in the game with other private stations.

Johnson explained that in its early beginnings KPCC had the technical aspect of what was needed to operate a radio station but no content to fill the airwaves. So Pasadena City College began offering classes to teach prospective students interested in radio production and to enable them to fill the airwaves with content. Johnson himself obtained a certificate in engineering operations from the college and became



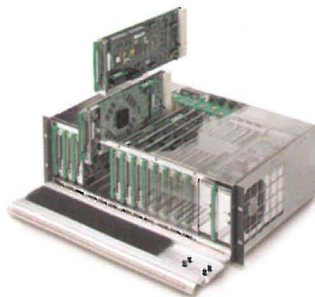
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(L-R): PCC Student Chair Akash Singh and guest speaker Doug Johnson.

involved as a student.

As the director of operations for the station, Johnson is responsible for directing many people, including the operations coordinator, master control specialist-engineer, senior engineers, and interns. He noted that when KPCC was purchased by Minnesota Public Radio, Pasadena City College drafted an agreement with the purchaser to include student involvement at the station. So every semester

KPCC offers 1 to 3 paid internship opportunities to students at the college.

Johnson also advised students on how to increase their chances of landing a job in the media. As the person in charge of hiring, he shared his views on what he looks for in job candidates. He added that KPCC offers competitive salaries, much like one would find at large private companies such as Clear Channel. Its current job opening as a production manager-engineer, offers a salary between \$50,000 and \$70,000 annually, with benefits.

"Its expensive to run a radio station," Johnson said. And since KPCC is public, its funding comes primarily from listeners, who donate about 55% of the annual budget, followed by 38% from sponsors; and the remaining 6% is granted by the federal government.—Horacio Jimenez, Secretary

## Rochester November 2006

The Section meeting was held on November 15 at the Louis B. Mayer Conservation Center, George Eastman House, in North Chili, NY. This is where the International Museum of Photography and Film holds its collection of approximately 27,000 reels of cellulose nitrate motion picture film, and on this evening, it opened its doors to SMPTE members.

Patrick Loughney, Motion Picture Department curator; Deborah Stoiber, nitrate vault manager; Edward Stratmann, associate curator; and Christina Stewart, curatorial assistant, were on hand to give a tour of the facility, which lasted for about one hour. Dividing the 31 attendees into three small groups, the George Eastman staff was able to show everyone all areas of the Conservation Center. Stoiber gave a brief history of the building and collections, and showed the mechanical room, including how the air exchange system is monitored and checked. Stratmann showed four different types of early color film, including three-strip Technicolor tests from *Gone With the Wind*, multicolor, cinecolor, and an early sound Kodachrome test made at the Eastman Theater in Rochester. Also on hand were some of the earliest examples of cinema, including the McKinley Inauguration Parade from 1897.



Ed Stratmann showing original nitrate elements to SMPTE visitors at the Rochester meeting in November.



(L-R): Ed Stratmann, Deborah Stoiber, Christina Stewart, and Patrick Loughney of George Eastman House.

Christina Stewart showed guests the structure and safety features of the vaults, as this was designed to meet National Fire Protection Association (NFPA) 40 regulations. She explained how the collection is organized and stored, and showed highlights from the vaults. Guests were able to see such treasures as the original camera negatives from *Gone With the Wind* and *Meet Me in St. Louis*, as well as where *The Wizard of Oz* is stored. The vaults are kept at 40°F and 30% relative humidity, and everyone could appreciate the work and effort made to keep these films in the best environment for long-term care. Patrick Loughney was on hand to answer questions.—Edward E. Stratmann, Section Manager

## Washington, D.C. October 2006

On October 26, the D.C. Section visited the new PBS Network Operations Center (NOC) in Springfield, VA. PBS is transitioning to a fully file-based workflow for network and affiliate operations, including ingest, storage, and delivery of programming.

Wendy Allen, director of the PBS Media Operations Center, presented an overview of the complex process that converts incoming finished shows on tape into various high- and low-



Attendees at the Washington, D.C., meeting in October.

resolution files for storage, viewing, and distribution. The PBS implementation involves equipment and software from several different manufacturers that link together digital storage with traffic and automation systems to provide, ultimately, a completely file-based process from tape to air.

Following Allen's presentation, O'Brian McKinley, director of the Network Operations Center, led a tour of the center's ingest and master control facility. The NOC not only provides program feeds to PBS affiliate stations in all U.S. geographic areas served by the network, but can also monitor affiliate activities in realtime via internet streaming. In addition, the NOC can remotely interrogate and control affiliate equipment to help diagnose and solve technical problems. Much of this internet-based technology comes from Miranda, which also provided the multidisplay controllers that drive the primary "monitor wall" of the NOC.

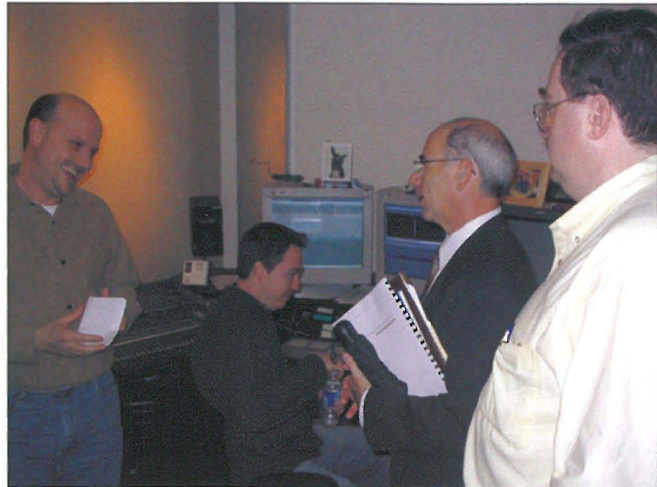
Many thanks to Wendy Allen, O'Brian McKinley, and Jim Kutzner of PBS; and Peter Wharton of Miranda, for their generous hospitality and refreshments.—*Eric Wenocur, Section Manager/Program Chair*

## Washington, D.C. November 2006

The Section convened at Discovery Channel's Creative Technical Center (DCTC) in Silver Spring, MD, on November 16, for a presentation on HD workflow and a look at this vast facility.



Attendees at the DCTC meeting.



Discovery's Clayton Dutton discusses editing with attendees.

Tony Cole, DCTC's vice-president of engineering, introduced the plant, which comprises over 60 SD and HD Avid edit suites, 4 audio post rooms, a dual SD/HD studio and control room, 2 central equipment areas, tape library, and numerous support offices. Primary functions at DCTC include program reversioning and cut-to-clock editing, incoming and outgoing QC, promo editing, and HD surround mixing.

Peter Riordan, vice-president of production, followed with a presentation on HD workflow issues and Discovery standards. Beginning with a brief introduction of HD scanning formats, the presentation continued with Discovery's requirements for handling aspect ratio and 4:3 protection, audio tracks, acquisition tape formats, and deliverables.

Follow-up questions also addressed issues such as HD routing and future file-based workflow.

Following the presentation, attendees broke into several groups for facility tours. Constructed in a former department store building, the DCTC interior features unusual room and hallway layouts and open ceilings that reach three stories in some places.

Integration was done by Communications Engineering, Inc., which co-sponsored the meeting refreshments along with Avid Technology. Many thanks to both companies, and the DCTC staff for their hospitality.—*Eric Wenocur, Section Manager/Program Chair*



L-R): Peter Riordan, Tony Cole, and D.C. Section Chair Karl Kuhn.