

SECTION MEETINGS



Washington, D.C. January 2015

For its first meeting of the new year, the Washington, D.C., Section staged a “show-and-tell” event, with attendees urged to bring unusual audiovisual items and explain their use or significance. The Thursday evening meeting was held at the National Association of Broadcasters (NAB) headquarters and began with refreshments and a time for networking and socializing.

In the absence of Section Chair Rudy Niznansky, the meeting was called to order by Section Manager Eric Wenocur, who conducted a short business meeting and then asked members and guests to come forward with any unusual items or gadgets. Manager Peter Wharton brought his Google “Cardboard,” a 21st century version of the “View-Master” handheld stereoscopic viewing device. Wenocur displayed a special high-voltage meter for reading static charges and also an unusual “spy” audio recorder made by Nagra, which used 1/8-in. reel-to-reel tape and could easily fit in one’s hand. Manager Bill Wesson brought along a couple of late-issue Amperex vacuum tubes.

Other items displayed that evening included an audio mixing production system be-



The Westinghouse secondary electron conduction camera tube.



Members and attendees posed with their “show-and-tell” items.

ing run by a “Leap Motion” control system that required no physical operator contact, a new tool for stripping and separating pairs in “CAT” data cables, a 1950s “printed couplate” (precursor of the integrated circuit), a 1970s-vintage magnetic (ferrite bead) computer memory card, and a rare Westinghouse SEC (secondary electron conduction) camera pickup tube, a version of which was used in the video camera Neil Armstrong carried with him when he became the first human to set foot on the lunar surface in 1969.

Lou Gershenson, Sony’s Baltimore broadcast and production sales, brought along a smart phone/tablet charging device from Sony Energy, as well as a new Sony 4K “Action Cam” and 500 Gbyte portable storage drive. The meeting concluded with Gershenson offering the drive as a prize in a “lucky number” drawing. It was awarded to Section Manager Karl Kuhn. Gershenson and Sony also sponsored refreshments for the meeting.—
James E. O’Neal, Section Manager



Section Manager Eric Wenocur shows off his ultra-small reel-to-reel “spy” recorder.

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Washington, D.C. February 2015

Washington D.C., Section members and guests were brought up to date on technology debuting at the 2015 International Consumer Electronics Show (CES), as well as provided with a “look” at the latest developments in virtual reality. The Thursday evening meeting was held at the National Association of Broadcasters headquarters in downtown Washington, and despite wintry weather and record low temperatures, attracted some 40 persons, including two SMPTE Governors, Karl Kuhn and John McCoskey.

Activities began with refreshments and an opportunity for networking and socializing. Afterwards, Section Chair Rudy Niznansky called the meeting to order and conducted a short business meeting in which he reminded attendees about the “Bits By The Bay” regional technology conference, which is organized by the Washington D.C. Section and will be held this year on 19-20 May in nearby Chesapeake



Despite record low temperatures in the Washington area, the NAB conference room was filled to near capacity for the February Section meeting.

Beach, MD. Niznansky also introduced Section member Rick Singer, this year's conference program chair, who provided an overview of some of the presentations planned for the spring event.

What's New At CES

The evening's first presenter was Eric Wolf, vice president of technology strategy and management at PBS. Wolf attended the January Las Vegas CES and offered his impression of technology trends evidenced at the show in a presentation titled “CES 2015—Notes and Observations.”



Eric Wolf, presenter at the February, Washington, D.C., Section meeting.

Wolf's “takeaways” from the show included the steady advance of computing power, increasing “connectivity” of consumer products, smarter cars, and the progress that's being made in connection with self-driving cars. He also noted the abandonment of proprietary platforms by television receiver manufacturers, the push to get UHD— along with higher frame rates, expanded color gamut, and high dynamic range—into consumers' homes, adoption of

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Meeting attendees got a chance to experience “VR” before and after speaker presentations.

object-based audio into consumer products, the rollout of over-the-top (OTT) television service, and the progress being made in connection with “drone” aircraft and consumer robotic products. Wolf also talked about the CES demonstration of over-the-air transmission of ATSC 3.0 video and also the latest developments in the field of 3D printing technology.

Looking At Virtual Reality

The second speaker was Rick Gold, who is the chief revenue officer and solution

consultant at Chesapeake Systems, a Baltimore-based information technology (IT) integration firm. He described how virtual reality or “VR,” which was a science fiction concept in the 1980s, has now become a marketable product, with many advancements being made and more and more persons becoming interested in using the technology. He gave an overview of the Oculus Rift company and the VR headset that they are producing and marketing. Gold noted that some of the impetus for VR growth and development was due to the maturation of the Internet—larger web companies now have a substantial amount of money to invest and are looking to back “the next big thing.” Gold also described the differences between virtual reality and augmented reality and discussed immersive video and the ability it provides for users to capture and replay “reality.” He closed his presentation with an appeal for SMPTE or other standards bodies to become involved in this developing field, as there are at present no standards for VR capture, post-production

techniques, or viewing technologies. Gold brought along two VR setups with Oculus Rift headsets to allow meeting attendees to experience virtual reality for themselves. —James E. O’Neal, Section Manager

Washington Section Tours Library of Congress Audiovisual Facility

The Washington, D.C., Section joined forces on 15 November, with the local Audio Engineering Society, for a joint meeting at the Library of Congress’ National Audio-Visual Conservation Center (NAVCC) located in Culpeper, VA. The facility is referred to as the LOC’s Packard Campus and is home to virtually all of the Library’s audiovisual activities. Despite the 160-mile roundtrip drive from downtown Washington out into the rolling hills of rural Virginia, about 80 members and guests of the two organizations made the journey to attend the special Saturday afternoon meeting and tour the LOC operation.

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James Snyder, SMPTE member and senior systems administrator at the Library of Congress's NAVCC, provided an overview of the scope of operations at the facility.



The meeting began in the facility's art deco movie theater which includes a modern version of the "Mighty Wurlitzer" organ played via this console.

The Library's 45-acre Packard Campus facility is unusual in that it is built into the side of a large hill—Mount Pony—and had formally served as a Cold War era currency and coinage repository for the Federal Reserve Bank. Most of the audiovisual operations are contained within the hillside,



The LOC Culpeper facility includes a small museum, with a number of the items on display having been formerly used in Library operations.

with offices and other working spaces added to the original structure in such a way as to minimize the visual impact on the surrounding landscape. Construction of the new additions was completed in 2007, and the facility officially opened for business the following year.

The Packard Campus operation is divided up into four areas: a 135,000-sq ft storage space for safety film, videotape, and audio recordings; a 175,000-sq ft conservation facility housing staff and restoration and reformatting operations; a 55,000-sq ft section containing 124 cold storage vaults for the library's collection of nitrate-base film; and 50,000-sq ft devoted to electrical, mechanical, and heating ventilation and air conditioning systems.

The 4 hr meeting and tour began in the facility's 200-seat "art deco" replica movie theater, with James Snyder, the NAVCC senior systems administrator, providing introductory remarks and giving an overview of the history and role of the 415,000 sq ft operation.

Snyder explained the role of the audiovisual facility within the overall operations of the LOC, and noted that the Packard Campus collection consisted of more than

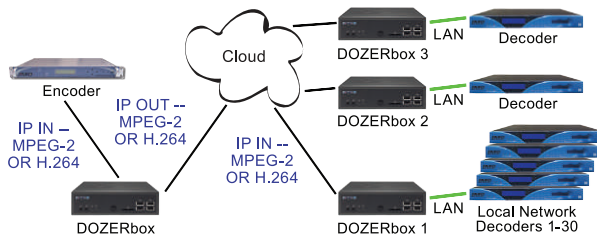


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Patrick Kennedy, an LOC datacine operator, demonstrates one of the systems used for scanning and digitizing film.



Washington, D.C. Section Chair Rudy Niznansky (right) examines a modern playback device for Edison cylinder recordings as audio preservation specialist Robert Cristarella explains LOC audio preservation operations.



The tour included this videotape digitization area. Boxes in the foreground contain videocassettes awaiting their turn to be played into the Library's massive data storage system.

seven million items, with some of these in fragile or degraded condition. The function of the operation is to preserve these items and migrate them to digital storage, with a goal of ensuring that the digital copies produced will last for at least 150 years; hopefully, forever.

A Mountain of Data

In his presentation, Snyder described the vast amount of digital content being gener-

ated by the facility, which is typically measured in tens of terabytes each month. He observed that a record of 169 terabytes had been set in September of 2014, and he stated that currently the operation had amassed some 5.3 petabytes of data to date, with more than 1.1 million separate files created. He explained that the facility has 53 points of digitization (PODs), with each generating between 2 and 150 Gbytes of audio, and between 50 and 1200 Gbytes of video on a daily basis. Snyder noted that based on the current rate of growth, projections indicate that within five years, the facility will be handling data amounting to some 300 Tbytes per week, or 1.3 petabytes per month.

After Snyder's briefing and a short business meeting, the group moved to another area of the facility for snacks and socializing before beginning the tour. Due to the large number of attendees at the meeting, several smaller groups were formed with each led by a Library staffer who served as a tour guide.—James E. O'Neal Section Manager



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