

Section Meetings

Ohio November 2005

The Section meeting on November 29 was held at the Industrial Video Corporation's conference auditorium in Columbus, OH, with approximately 35 attendees. The program included Power Point presentations by John Owen of Sprint-Nextel, who discussed two very timely broadcast topics. The first was a progress report on the 2-GHz band re-location project, and the second concerned the need for every TV station serving the general public to develop and use a disaster preparedness plan, well in advance of any emergency situation. Owen began by displaying a map graphic of the progress, which has been made across the U.S. since Sprint-Nextel began relocating incumbent BAS, CARS, and LTTS, licensees operating within 1990-2110 MHz to a 2025-2110-MHz digital spectrum. TV stations need to occupy those frequencies for utility purposes such as transmitting ENG news reports and other special programming, back to a station's studio or transmission plants.

In the second part of his presentation, Owen outlined the actions a typical TV broadcast plant should undertake when creating a disaster preparedness plan of action. He pointed out that such a plan would be crucial in restoring, as rapidly as possible, a station's broadcast signal, which could provide an urgently needed route for emergency announcements, advisories, and so on, within a station's signal coverage area. He stressed the importance of meeting with all of the utility companies serving the station plants well in advance and on a regular basis, to ensure electrical service restoration priority. Another point involved the establishment of a printed list of TV station employee telephone numbers, for quick interaction between key departments within the station's plants. This could help facilitate a quick response, leading to an eventual restoration of at least minimal broadcasting services, for the good of the community in which it serves.

A lively Q&A session followed the two presentations. Sprint-Nextel furnished the refreshments for the evening's meeting, and Industrial Video Corp. furnished the meeting room logistics including a portion of the audiovisual support.

—Gene L. Batey, Secretary/Treasurer

San Francisco October 2005

On October 27 and 28, SMPTE and SBE members and guests gathered at the studios of KCMS in San Mateo for a presentation titled, "The D-ENG Transition: Migrating ENG from Analog to Digital," by David Otey, Bill Hamilton, and Ben Kretchmar of SignaSys, Inc. A recent FCC ruling directed Sprint-Nextel Corp. to pay for new equipment that TV broadcast stations will need for digital electronic newsgathering (D-ENG). In exchange, at the end of 2007, the stations will vacate a portion of the 2-GHz Broadcast Auxiliary Service (BAS) band, which will be used by Sprint-Nextel and others for next-generation wireless services. Broadcasters are currently using this portion of the BAS spectrum for analog electronic newsgathering and for fixed microwave links. The reduction of this BAS band by 35 MHz and its reallocation to new services are part of a trend toward more efficient use of the radio spectrum enabled by new digital technologies.

Sprint-Nextel has hired SignaSys to provide technical training for the 2-GHz BAS relocation. The presentation offered a project preview. The SignaSys experts covered the migration from analog to digital ENG; digital modulation, and key elements of COFDM; a review of MPEG compression principles; and the "Practical Ps:" Paths, Payloads, and Presets. SignaSys plans to send seven experts to 1,100 television stations over the next two years to train engineers, technical staff, and managers who make ENG-related decisions. The presentation included information that will be provided in the training sessions, such as differences between analog and digital transmission paths; compression = encoding and decoding signal; COFDM modulation; relaxed requirements for the RF path, with less susceptibility to multipath and greater ranges at lower QPSK modulations. The training sessions will also include hands-on training for signal acquisition, polarity, multipath, co-channel interference, error cliff, and re-growth.

SignaSys' field training will include demonstrations of faulty shots and how to diagnose and correct them, as well as analyze the workflow for D-ENG. New considerations unique to D-ENG will include adjusting digital payload size for audio, video, and data, as appropriate, to support the scenes being shot. Unlike analog, more power is not better! SignaSys will also demonstrate signal acquisition and analysis tools as part of the training, which will be tailored to each television station, by using equipment already familiar to trainees.

—Kellie McKeown, Section Manager

Washington, D.C. October 2005

The Section joined with the Association of Washington Executive Broadcast Engineers (WEBE) for their annual Technical Convention, held October 13-15 at the Clarion Antietam Creek Hotel and Convention Center in Hagerstown, MD, and was attended by about 50 industry professionals. The theme for the event was "New Technologies: Wired and Wireless." The program included presentations on a range of topics, including production workflows for mobile content, architectures for DVB-H systems, compression and the RF transport layer, microwave radio design for HD ENG, the 2-GHz microwave BAS transition, a telco video operations center digital transition, HDV production, wireless microphone design for the DTV world, and trouble-shooting the RF environment.

Presenters are too numerous to list, but included

many well-known names from broadcasting and telecom organizations, manufacturers, and vendors.

The convention concluded with an excellent four-hour workshop on surround-sound production and technologies presented by Mike Sokol of Fits and Starts Productions. Attendees appreciated the insight into techniques for surround-sound production, illustrated by many recorded examples, and the useful information on implementation for broadcasters.

The group enjoyed receptions, refreshments, and meals, thanks to generous support from sponsors Avid, BenThere Media, CEI, Lawson & Associates, Maxell, MCI, Miranda, Systems Wireless, and Tektronix, with in-kind services from Bexel and Systems Wireless. Thanks and congratulations are also due to the program organizers, principally James Snyder, for putting together an excellent program, and to Ben Johnson of BenThere Media, for handling the administration.

—Graham Jones, Section Manager

SMPTTE AT NAB 2006

Digital Cinema Summit at NAB 2006

Digital cinema is rolling out in theaters in the U.S., U.K., and Asia. Its implementation is raising new technology, business, and creative issues for many facets of the entertainment industry, from production and post-production, to distribution and exhibition. Important lessons can be learned from recent digital 3-D releases and from the mastering and packaging of feature films and the manufacturing of equipment according to Digital Cinema Initiative specs.

SMPTTE and the Entertainment Technology Center at USC are again joining forces to examine the current state of digital cinema at the premiere event of its kind: the Digital Cinema Summit at NAB on Saturday, April 22 and Sunday, April 23, 2006. Saturday's sessions, which are programmed by SMPTTE, focus on digital cinema distribution and exhibition and feature the latest in display technologies including 4K and 3-D; business opportunities; and lessons learned from the rollout to date. Sunday's events, which are organized by the

Entertainment Technology Center at USC, concentrate on visual and audio production and post-production and include preparing content for 3-D presentation; digital intermediate developments; digital cinematography; and making the digital source master. Motion pictures case studies will be featured throughout the weekend.

Join filmmakers and other content creators, production and post-production experts, studio executives, theater owners, and distributors at NAB's Digital Cinema Summit 2006.

SMPTTE Member NAB Discount

Again, SMPTTE membership saves you money! SMPTTE Members save hundreds of dollars off non-SMPTTE/NAB registration to NAB this year. If you're not yet a SMPTTE Member, and want to have your membership pay for itself in savings to NAB, join SMPTTE, and then register for NAB 2006.

For developing information, visit the SMPTTE website (www.smpte.org) or the NAB 2006 website (www.nab.org).