Chicago
May 22, 2001

The May meeting was held jointly with the Chicago SBE Chapter 26 and attracted 35 attendees. The first presentation was given by Scott Fehl, products manager, Gepco, who reviewed the specifications of AES audio and offered the considerations for using either 110-ohm shielded, twisted pair cabling or 75-ohm coaxial cable for AES applications.

Gary Geppert, president, Gepco, followed with a tutorial on the technical considerations for choosing various types of coaxial cable for video applications. He covered the issues of return loss, impedance, and transmission characteristics. Geppert shortened his presentation in order to give a tour of the coaxial cable manufacturing line, where attendees witnessed the production of coaxial cable. The process begins by prepping the copper center conductor and coating it with the dielectric. Next the foil shield and braided shield are applied. A testing phase measures the impedance at various frequency sweeps out to 3 GHz. Finally the outer PVC jacket is applied.

Geppert offered to host a future meeting to cover the details of his presentation.—Steve Robinson, Secretary/Treasurer

Hollywood
May 15, 2001

The May meeting was held at the Gene Autry Museum in Los Angeles, CA, with 125 attendees. The program titled,"...and also Selected Short Subject," was an 80-min film consisting of 35mm prints of theatrical subjects produced from 1928 to 1954. Clips included: *Willie and Eugene Howard: Between the Acts at the Opera*, WB 1928 (original sound recording from Vitaphone disc); *The Locust Sisters,* MGM 1929; *Goofy Movies,* MGM 1933; *Good Morning, Eve*, WB 1934 (one of the earliest live-action three-color Technicolor subjects); *Mechanix Illustrated*, WB 1938 (photographed in an undesignated two-color process, and describing the technology of television; *Borrah Minnevitch and His Harmonica School,* WB 1943 (a beautifully photographed black-and-white musical short); *Overture to the Merry Wives of Windsor,* MGM 1954 (presentation of a perfectly preserved 47-year-old Technicolor dye transfer print.

The showing was followed by a Q & A session discussing the technology of some of the processes represented.—Richard May, Secretary/Treasurer

The New York Section meeting in May: (l) Richard Carlson, Program Chair, Motion Picture; (r) Dr. Roger Morton, Eastman Kodak Co.

New York
April 18, 2001

The lecture room at NYU was filled to capacity for the April meeting. Roger Morton, Kodak's Research Laboratories, presented a paper titled "Assessing the Quality of Digital Motion Picture Cinema Systems," which was followed by a stimulating discussion.

Researchers at Kodak have undertaken a study of multiple metrics, comparing film to digital acquisition in the feature production model. The paper presented the results of nine metrics that were tested. The analysis showed that real-world scenes could actually produce about 20 Stops of dynamic range, and with the miracle of human vision, color such as the highlight reflection over this range can be seen. The 20+ Stop range of film preserves highlight color and saturation. Sharpness of film and electronic systems were evaluated using the ISO 12233 method of determining resolution and the SQRI method of Barten. Aliasing, MTF, and depth-of-field were also part of the study.

Based on the research, Morton stated that image quality cannot be defined by a single metric, because a group of film is superior by a significant margin in the metrics evaluated. Future digital cinema standards including transmission and compression will, hopefully, be able to transmit the full quality of grain reduced, sharpened film as reported in the discussion.

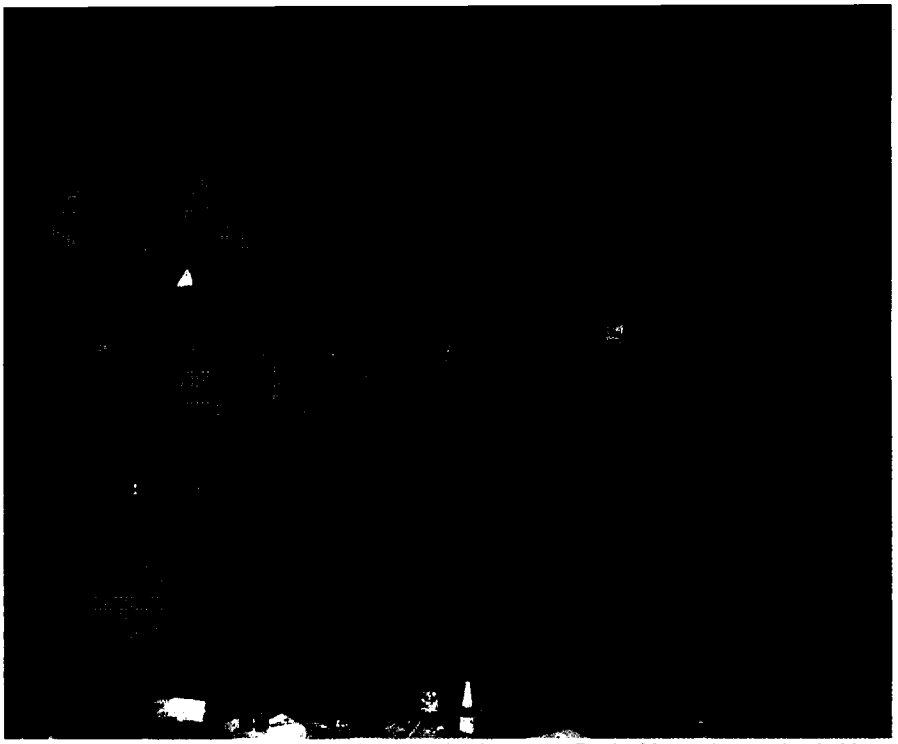
There was intense interest in the testing techniques utilized and conclusions from this research. Morton indicated that studies continue and was appreciative of the audience queries and suggestions.—Richard Carlson, Program Chair, Motion Picture

Ohio
May 24, 2001

The May meeting took place at the WBNS.DT broadcast plant in Columbus, with 45 members and guests in attendance. The theme was "TV Displays, Past, Present, and Future." Bruce Babcock, Thomson Consumer Electronics Division, the first of two guest speakers, gave a presentation reviewing the history of black-and-white and color television display technology leading to the present DTV transition. Babcock covered television market demographics over the years, such as "high-end users" who support the latest TV displays from the very start of any new TV model-line introduction. He reviewed the FCC mandate and timetable for full DTV display conversion and possible hurdles in accomplishing it. He also mentioned that as a result of the recent merger with Philips Broadcast, the combined companies will be able to offer both broadcast and consumer displays.

The second speaker Ed Milbourn, manager of Thomson's Product Planning and Advanced Television Systems Division, gave an informative presentation detailing what the DTV display industry might introduce in the next few years. He started with the current year through 2011. Many members were amazed to see that future displays have little resemblance to today's models. Milbourn stated that future models will carry more of the "wider pipeline" ATSC signal than is currently broadcast today. The terrestrial DTV broadcaster of the future will need to participate more in data streaming and software downloading, multicasting, etc., perhaps for survival against other competing media sources within markets such as, the internet, cable, satellite, and telcos. Milbourn emphasized that future DTV displays will be required to receive more advanced data streaming signals than those currently in use, via protocol standards now being developed. This will result in an interactive experience for DTV set owners, never before possible.

The presentation concluded with a Q & A session. Refreshments and meeting room facilities were furnished by WBNS.DT.—Gene L. Batey, Secretary/Treasurer, The Ohio State University, OIT



Kimo Quaintance, KCNC, describes fiber termination at the Rocky Mountain meeting in May.

Rocky Mountain
May 16, 2001

AT&T Broadband hosted the May meeting with presenters Rob Granard, Westlake Electronic Supply, and Micheal Creamer, FAV Inc., who provided an overview of fiber characteristics, transmission methods, and fiber applications in the broadcast environment. Kimo Quaintance, KCNC maintenance engineer, also provided hands-on experience with termination of fiber optic cable.

We wish to thank our sponsors and presenters for a most informative meeting.—Rome Chelsi, Section Chair

Sacramento
May 16, 2001

The May meeting was held at Ensemble Designs in Nevada City, CA. Presenter Renee Pardovich, Logic Innovations, discussed TCP/IP encapsulation in the DTV world. He pointed out that this might be the only way broadcasters will be able to make money in the near term, until set penetration allows a shift from NTSC and ad revenues follow.

Pardovich showed a number of system-level diagrams, which demonstrated the complexity of using unused bits in the DTV stream, for data transmission. He pointed out problem areas and revealed how null packets can be stripped from the MPEG stream, allowing more data bandwidth. The topic was well received by the 18 attendees.—William Carlquist, Section Chair