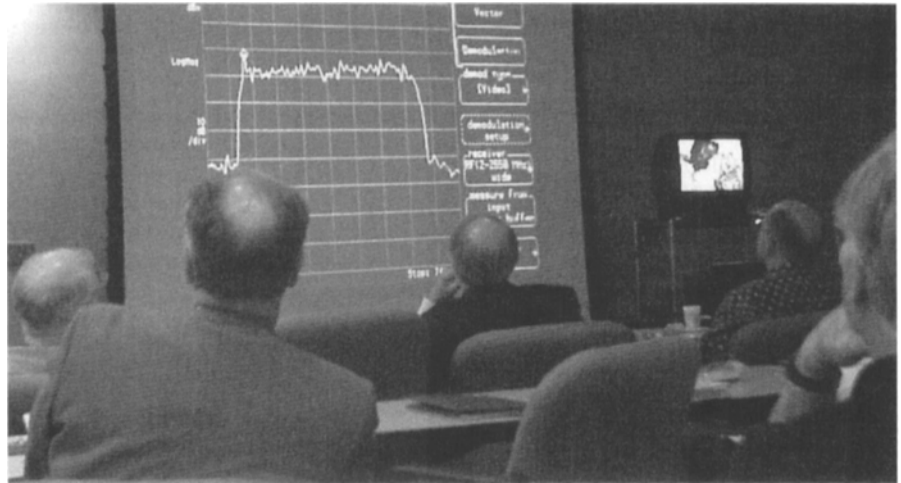


# Section Meetings

## Chicago September 21, 1999

The September meeting attracted 25 attendees for a presentation by Jed Deame, TeraNex. Deame discussed a new approach to DTV format conversion. He stated that FCC Table 3, illustrates that format conversion will become a major factor in the future of DTV. According to Deame, both broadcast and post-production applications will require high-quality image processing. He also described the current "state-of-the-art" approach to building a format converter, using field programmable logic chips. These chips have a maximum limitation on how many computations can be performed in a single field of time, which forces compromises on the image processing and subsequent picture quality. TeraNex has approached this task by building a parallel processing super computer.

Deame also described a SIMD (Single Instruction Multiple Data) architecture. A key characteristic of this design is linear scaling, which allows numerous CPUs to work in parallel, thus achieving the required number of operations per field time for uncompromised processing. The TeraNex computer has enough processing headroom to perform the highest quality image processing, including motion compensation in SDTV to HDTV upconversion. Deame pointed out that once the hardware platform is complete, the tasks to be performed are a matter of writing a software algorithm. This allows the flexibility to expand the processing options beyond



Live demonstration using local DTV signals, at the Detroit Section meeting.

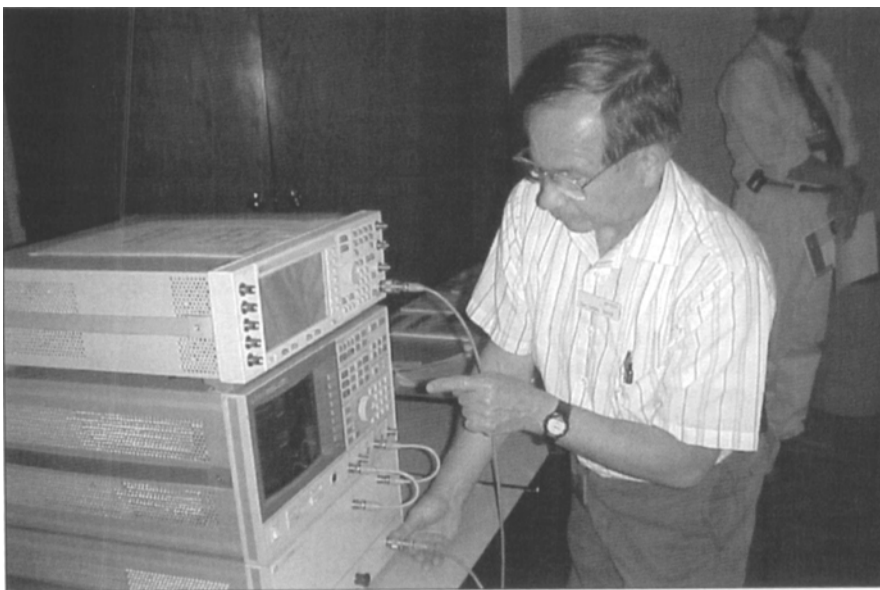
format conversion. Numerous other image processing tasks such as noise reduction and detail enhancement are slated in the future. The presentation was followed by a Q and A session.—Steve Robinson, Secretary/Treasurer

## Detroit September 14, 1999

The September meeting was a seminar on digital television measurements hosted by Hewlett-Packard at its facility in Novi, MI. Seminar presenters Barbara Gill, who spoke via telephone from Hewlett-Packard's Denver, Colorado office, and Daun Yeagley, discussed the basics of digi-

tal television signals and measurements, and demonstrated the use of test equipment for evaluating quality of service, troubleshooting impairments, and ensuring compliance with standards.

Gill began the meeting with an overview of the tools necessary for signal management and measurement from the production facility to the transmitter. Yeagley discussed various modulation methods for DTV and also spoke about filtering for spectral efficiency. He explained 8-VSB modulation in detail with a step-by-step description of the transmitter chain. One of the components of what Hewlett-Packard calls the DTV toolbox, the HP 89441V Vector Network Signal Analyzer, was demonstrated, using live local DTV signals. Finally, participants were given the opportunity to ask questions and gain hands-on experience by making critical DTV measurements on the demonstration unit.—Helge Blucher, Secretary/Treasurer



Detroit meeting in September. Daun Yeagley Hewlett-Packard, demonstrates the HP 89441V.

## Hong Kong June 14, 1999

A seminar titled "Testing DTV/DVB Systems," took place at the Hong Kong Industrial Technology Centre. Mike Hillman, Snell and Wilcox, began the presentation by giving a brief account of the development and trend of digital television broadcasting in Europe, North America, Australia, and the systems adopted by various countries. He then introduced methods of testing and measuring digital services and compared realtime with off-line evaluation. Other related topics discussed included physical interface; packets, time stamps and tables of system level; video buffer parameters; and video analysis.—Noel Leung, Manager



Mike Hillman, presenter at seminar, "Testing DTV/DVB Systems," on June 14 at the Hong Kong Industrial Technology Centre.



Mike Hillman (l) and K. L. Lam, Chairman of the Hong Kong Section.

### Napa Valley August 23, 1999

Chapter 11 at Napa Valley College is off to a great start. This year's officers are Bryte Beevers, president; Maricel Sweeney, vice-president; Carlos Rodriguez, treasurer; Susan L. Ball, secretary; and Damon McLaughlin, web master. Several members attended the SMPTE meeting at Silicon Graphics in Mountain View, CA and made favorable reports to the group. We have also had our first fundraiser and are making plans for future events. We invite you to visit our website at [NAPANET.NET/~SMPTE-11/](http://NAPANET.NET/~SMPTE-11/). We are all very excited and it looks to be a great year for Chapter 11, here in the beautiful Napa Valley.—Susan L. Ball, Secretary

### New York September 28, 1999

Approximately 80 members and interested professionals attended the first meeting of the 99-00 season. The program, titled "Electronic Cinema: An Overview," began with a screening of high-definition feature material (both film clips and trailers) on a digital projection DMD projector. After the audience was suitably wowed, Bill Werner, Texas Instruments, explained the underlying technology of DMD (Digital

Micromirror Device) and how it relates to electronic cinema. Werner covered the entire process from fabrication of DMD devices to the prototype e-cinema projector systems used recently for "Star Wars: Phantom Menace," and other public demonstrations.

John Dowdell, Tape House, followed with a look at more high-definition transfers and how the transfer and grading process might differ between video releases and e-cinema releases. Dowdell also dis-



Speakers at the New York Section meeting in September. Left to right. John Dowdell, Tape House; Jeff Schneider, Digital Projection; Bill Werner, Texas Instruments; and Hugh Heinsohn, Digital Vision.

cussed the creative potential re-mastering on a video format may provide to filmmakers. Hugh Heinsohn, Digital Vision, rounded out the panel by presenting an objective view of what an e-cinema "system" might be, noting that although a good display technology may be the enabler to e-cinema, other issues such as encryption, security, and distribution have not yet been adequately addressed.

The New York Section would like to thank all those who helped make this exciting meeting possible, especially Scharff-Weisberg, for the use of the DP projector; Panasonic, for the D5 VTR; and Bell Atlantic, for their support and the use of their auditorium.—Bill Topazio, Chairman

### Sacramento September 22, 1999

The September meeting, titled "IBC '99 Views from the Other Side of the Pond," was an open forum discussing highlights from the recent International Broadcast Convention in Amsterdam, The Netherlands. Three of the local chapter managers, Cindy Zulesdorf, Mark Narveson, and Jim Blecksmith, who recently attended the convention, presented the information. Zulesdorf opened the meeting by detailing the statistics of the show, which reflected an increase in attendance from non-European countries.

Mark Narveson detailed some recent changes in the industry, including the purchase of CBS by Viacom and the sale of Grass Valley Products by Tektronix.

Time was spent discussing the plans for showing 24-frame film at 25 frames per sec with audio pitch correction, as well as the 576p/50 standard adopted by SBS-TV in Sydney, Australia.

Notable products exhibited at the convention included the Zcam, which produces depth information when scanning a scene