Report on the 59th Annual NAB Convention

Las Vegas, April 12-15, 1981

The Annual Convention of the National Association of Broadcasters (NAB) was held this year on April 12-15 in Las Vegas. Attendance was up four percent from last year.

Engineering Sessions

There were a number of engineering sessions at NAB, covering various technological fields such as distribution systems, protection of the switched network, new automatic devices, the development of high-quality AM stereo receivers, and satellite transmission, including the subjects of noise-reduction techniques, small dish antennas, stereo, and Earth stations.

The SMPTE presented a workshop chaired by Carlos Kennedy. It began with a summary, by Robert Thompson, of the papers on digital VTRs that had been given earlier — at the 15th Annual SMPTE Television Conference in San Francisco during February 1981. The SMPTE presentation also covered the discussions held (at the earlier conference) between the EBU and the SMPTE in their efforts to attain a world digital standard for television. A panel discussion — with panelists Frank Davidoff, Bill Connolly, Ken Davies, Charles Ginsburg, Roland Zavada, and Robert Thompson — continued the discussion on the quest for a digital television standard and also discussed the digital video component demonstrations held in San Francisco by the SMPTE.

On the final day of NAB 81, a major digital standards committee meeting was devoted to a discussion of a universal digital coding technique for color television.

Other engineering sessions held covered such topics as UHF transmitter efficiency, high-power RF systems, vertical interval machine control systems, regulator problems in new broadcast facilities, and an update on the work of the EIA Subcommittee on Teletext Systems.

The SMPTE's booth was centrally located in the exhibit area, where it served as a display case for the Society's test materials and publications. Manned by Donald Breidt (Executive Director), Alex Alden (Manager of Engineering Services), and Peg Caggiano (International Standards Coordinator), it served as a base for SMPTE members and as an introduction to the Society for prospective members. By the end of the fourth day, approximately 38 new members had joined the SMPTE, with several exhibitors expressing interest in becoming Sustaining Members.

The SMPTE is pleased by its close liaison with the NAB, which provides it with the opportunity, through its technology committees, to help resolve the technical problems that arise in our expanding industry.

Exhibits

The visual impact of NAB 81 was exceptional. Almost every major exhibitor and several minor ones had impressive visuals displayed on monitor screens, to the delight of the engineers and program people attending the show. Advanced digital effects were a prominent part of many displays. Also eye-catching was the wide array of digital graphics systems that created weather maps, topical news images, abstract art, cartoons, logos, and a host of other static or animated TV pictures to enhance studio production or post-production.

NAB 81 represented a significant turning point in the ENG field through the introduction of at least three in-camera VTR systems by several different manufacturers. It seems likely that other companies that make ENG or EFP equipment will jump on the same bandwagon and soon announce their own versions of a similar combination. What is, perhaps, unfortunate about this new development is that the camera/VTR units shown at NAB were in two new formats utilizing the Betamax and VHS tape cassettes, with neither adhering to the consumer VTR format already in use, nor to each other's new broadcast format. What we now have is the Beta/VHS battle moved up another notch, to a new level of more sophisticated incompatibility.

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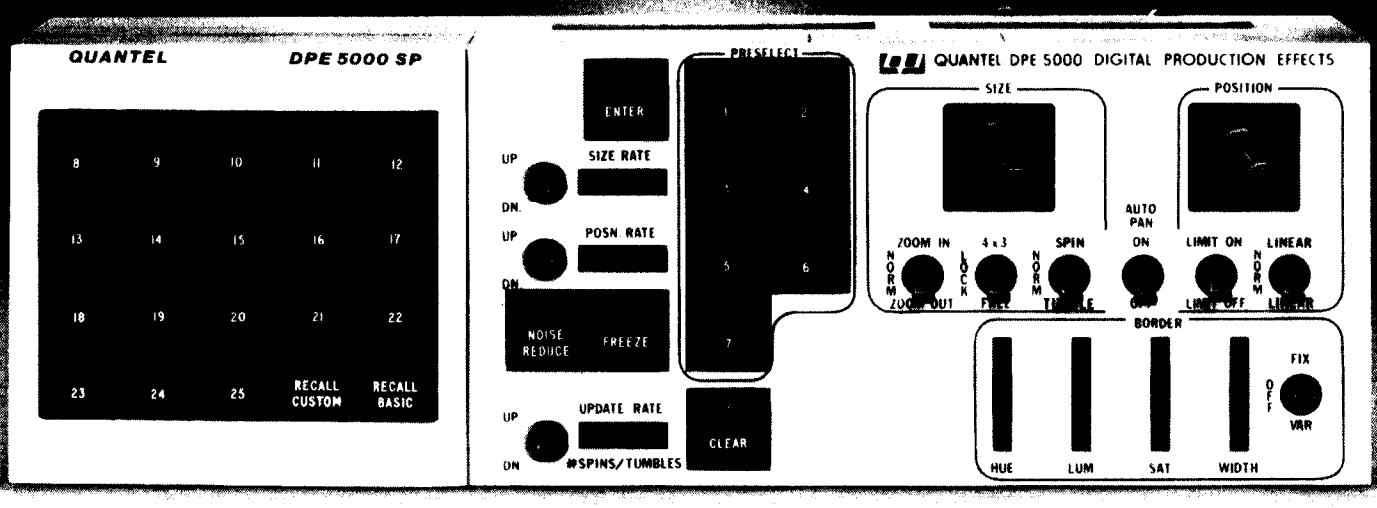

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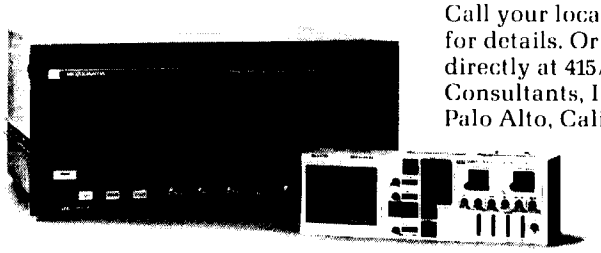

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The digital video people

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The digital videographics field also erupted with a wide variety of competing systems that ranged from animated alpha-numerics to full computer-generated images that could be manipulated in near real time. It appears that studio production people are becoming accustomed to digital gadgetry, and interest ran high in the various levels of computer-assisted graphic systems that were on display. Watching the artists at their "electronic palettes" became one of the favorite pastimes for many of the NAB visitors touring the show.

Editing was also in the forefront of many of the exhibits. In addition to the many familiar editing systems already available from a multiplicity of manufacturers, a few new ones have been added. Virtually all of the companies that make VTR editors had some new product or some upgraded feature on display.

The "Teletext War" was in full swing, with the British, the French, and the Canadians in full battle regalia on the convention floor. Antiope Videotex Systems, with heavy CBS support, fielded two live feeds via satellite from Los Angeles, where both KNXT and KCET are currently transmitting experimental teletext using a 525/60 NTSC version of Antiope. For the first time, U.S.-made receivers (made by RCA and Magnavox, with built-in decoders) were used for this demonstration. The U.K. forces displayed BBC Ceefax pages relayed from London and had locally-generated teletext pages on a variety of Zenith domestic TV sets with integral decoders. The British have countered the CBS petition to the FCC to standardize on Antiope with a petition of their own, that describes a five-stage system of teletext service expansion. The last contender was the Canadian Telidon system. They were in evidence with signals piped in from north of the border, to prove the claim that Telidon makes smoother graphics. The Telidon contingent has not yet filed a petition with the FCC, and so is not yet officially a combatant in this struggle for teletext supremacy.

A major section of the parking lot adjacent to the South Hall was reserved for displaying a vast array of parabolic dishes. It was an impressive sight — dozens of satellite antennas, of varying size and heft, all pointing upward to those invisible transponders in the sky, hovering in geostationary orbits 22,300 mi (35,680 km) above the equator. Apparently, satellite uplinks and downlinks have become so easy to set up and so inexpensive to operate that anyone at NAB with a need for a feed was getting it from the "birds." The dishes ranged in diameter from under 5 ft (1.5 m) to over 5 m. They sat on modified-camera tripods or on huge tractor-trailer rigs that included hydraulic-steering mechanisms. Many of the complete earth stations seen on the Convention Center parking lot metamorphosed from small vans with ingeniously folded antennas. "Have dish, will travel" seems to be the motto of many of these suppliers of satellite antennas. It was quite evident from the multiplicity of antennas on display that both broadcasters and cable companies are becoming attracted to this new and convenient form of instant communications.

Nostalgia was a significant theme at NAB 81. Ampex and 3M were celebrating the 25th anniversary of the introduction of commercial videotape recording. Ampex had unveiled their VRX-1000 in 1956, and 3M made the medium that was used to demonstrate the VTR. Perhaps the most notable piece of memorabilia was generated by Ampex and shown frequently at their booth. It was a fast-paced historical review of the significant VTR milestones of the last quarter century, interspersed with the key news events that had been recorded on tape.

By all accounts, the NAB convention was a resounding success. There may have been fewer people from Europe, probably because the 1981 Montreux International Television Symposium and Technical Exhibition takes place only six weeks later than NAB 81. There was, however, good attendance from Latin America, with many of those delegates prepared to buy some of the things they wanted. It was in effect a selling show, with most exhibitors concentrating on getting orders for the equipment they could deliver instead of showing laboratory models of future products.

To briefly summarize the exhibits, one could say that last year's cameras all looked a little better this year, last year's VTRs all had new features or accessories, last year's lenses were now lighter or smaller, and last year's digital devices were now smarter or less expensive. It was also an RGB (red, green, and blue) year, with many of the exhibitors using RGB mode color monitors to show the intrinsic quality of their products or video processes. Picture quality was much improved at this year's NAB show, as many delegates noted with considerable satisfaction.

The site for the NAB Convention in 1982 will be Dallas, Tex. Current plans call for Las Vegas to be used in alternate years (1983, 1985, etc.).

Joseph Roizen
Alex Alden

Invitation to Opryland

The next (16th) SMPTE Television Conference is scheduled for February 5–6, 1982 at the Opryland Hotel in Nashville, Tenn. Readers are invited to make plans to attend—see future issues of the *SMPTE Journal* or contact SMPTE headquarters for further information.