



TECHNICAL COLUMNS

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EXPO SHOW PICKS

By RON HRANAC

Cable-Tec Expo 2006 has come and gone, and what a show it was. This year's confab was held in the mile high city of Denver. A big tip of the hat to SCTE headquarters staff and the Expo Program Subcommittee for pulling off a successful event. Attendance was up slightly from last year, as were exhibit space and exhibitor numbers.

"TourDay Tuesday," a new Expo function, allowed attendees to participate in a guided tour of four cable technology facilities in the Denver area: CableLabs, the Comcast Media Center, Starz Entertainment Group and The Cable Center.

The opening general session once again featured informative CEO and CTO panels moderated by industry vets Paul Maxwell and Leslie Ellis. Busy floor traffic graced the exhibit hall, and there was a bunch of top-notch technical workshops from which to choose.

If there was an overarching theme surrounding this year's Cable-Tec Expo, it probably was the subject of bandwidth. Switched digital broadcast, 1 GHz amplifier technology, bandwidth extension (operating well above the usual downstream upper frequency limit), improved digital compression efficiency with technologies such as MPEG-4, and channel bonding—a key part of the next version of DOCSIS—were among the tools being touted to extend system bandwidth or make more efficient use of what's already in place.

Expo's receptions provided an opportunity to relax after a busy day, catch up with old friends and enjoy the hospitality of the event sponsors. This year's Expo Evening was held at Red Rocks Park and Amphitheater, a natural sandstone amphitheater in the foothills west of Denver. A popular concert venue (the Beatles performed there in 1964), Red Rocks was a fun place to unwind, even with the intermittent evening thundershowers. Closing night receptions, including the ham radio operators, SCTE-List, and Loyal Order of the 704 gatherings, put the ribbons on Expo.

Goodies and gadgets

Each year I manage to find some time in between meetings to wander around the exhibit hall in search of interesting technology, gadgets and goodies. Here, in no particular order, are my Expo '06 picks.

Traffic cones are not something that comes to mind when one thinks of interesting technology. But a collapsible 28-inch nylon traffic cone in Javaco's booth caught my eye. Manufactured by Allsafe Services & Materials, the cone collapses to 3 inches, features reflective stripes and an internal light emitting diode (LED) for improved nighttime visibility. An available four-pack of cones comes with a carrying case.

www.javacoinc.com

Ever run into a situation where drilling through a wall is not possible or practical? Why not just run the coax through a window or door? "Hah!" you say. "Close the door or window, and the formerly round cable is now flat cable." Well, Times Fiber Communications has come up with just that: A flat cable jumper assembly. The 12-inch jumper has F-connectors on each end, is designed to operate from 5-2,150 MHz (that's 2.15 GHz!),



survive 50,000 window or door closures, and still yield 100 dB shielding effectiveness, 12 dB return loss and 1.3 dB maximum insertion loss at 2.15 GHz. www.timesfiber.com

CablePrep put together a handy collection of tools in what they call the PIK, or premises installation kit, for 59- and 6-series drop cables. The package includes the company's CC-series drop cable cutter, CPT-6590 cable stripper, PT5000UNV-659 Pocket TerminX compression tool, and Wind Ding torque wrenches and coding rings. Included in the kit (p/n PIK-659) is a coupon that can be sent in for a free tool pouch designed to hold the kit's tools. www.cableprep.com

Budco was demonstrating a truly clever gadget for that never-fun job of fishing cable through walls. Called the Magnepull wall fish kit, the user attaches a leader magnet to the end of the drop, and a handheld roller with a very powerful magnet (comparable to the old AML microwave klystron magnet, but physically smaller) is used to guide the cable and leader magnet through the wall. The booth demo included a section of wall covered with sheetrock, with the space between the studs full of insulation. I found that even I could make this device do what it is intended to do. www.budcocable.com

Sunrise Telecom introduced its AT1800RQS portable analyzer. This battery operated device supports spectrum analysis, quadrature amplitude modulation (QAM) analysis, system sweep and DOCSIS analysis. Based on the Windows CE operating system, interfaces include universal serial bus (USB), Ethernet, RS232 and a DOCSIS cable modem. Expected availability is September of this year. www.sunrisetelecom.com

Speaking of analyzers, Trilithic introduced the 8821Q, a 1-1,000 MHz spectrum analyzer with targeted availability in late summer or early fall. Users of Agilent's venerable but discontinued 8591C will see something a little familiar here. This spectrum analyzer supports the usual suite of cable measurements, tosses in QAM analysis, and is battery operated to boot. www.trilithic.com

What do you get when you cross an SDA-5000 with the DSAM series of test equipment? The answer is JDSU's new DSAM-6000, a 4-1,000 MHz digital service analysis meter that supports forward and reverse sweep, digital and analog video, DOCSIS and PacketCable voice over Internet protocol (VoIP) testing in one handheld instrument. www.jdsu.com

Our friends at Alpha Technologies had one of those "why didn't someone think of that before?" products on display. It's a battery expansion enclosure that attaches to the underside of the company's existing PWE three-battery enclosures, supporting the addition of three more batteries for increased standby capacity. No need to replace the existing housing! www.alpha.com

New and improved: Remember Arcom's CPD (common path distortion) Hunter? It was my show favorite last year. Arcom has upgraded the technology to support tracking down CPD using existing downstream analog and digital signals, eliminating the need for 12.5 MHz of dedicated system bandwidth for the previous generation product's "radar" signals. Now called Arcom Digital Hunter, proprietary cross correlation technology is used to find that pesky CPD—even if it's below the upstream's noise floor! www.arcomdigital.com

When I was a tech way back when, the signal level meter (SLM) of choice was the Jerrold 727. Not quite portable by today's standards, technology has allowed SLM functionality and then some to be squeezed into ever smaller packages. ComSonics' new Companion is a handheld instrument about the size of a digital multimeter. It supports signal level measurements of analog and digital signals and adds modulation error ratio (MER), bit error rate (BER), and upstream and downstream throughput. Expected availability is the end of the year. www.comsonics.com

Phoenix Broadband Technologies' PowerAgent battery monitoring system accommodates remote battery plant monitoring. A site controller called MasterAgent connects to as many as six monitored battery strings. A small sensor unit—the company's BatteryAgent—is connected to each battery. The sensor measures battery voltage, temperature, and battery parameters such as conductance. www.phoenixbroadband.com

And my show favorite? Drum roll, please...

VideoTek's PTM-305 is a battery operated handheld analog and digital video and audio measurement instrument that's about the size of a personal digital assistant (PDA). The PTM-305 is a color video monitor, video test signal generator, video waveform monitor and vectorscope, serial digital data analyzer, and embedded serial audio monitor. The display is a 320x240 color liquid crystal display (LCD), and fully charged AA nickel cadmium batteries provide up to four hours of operation. www.videotek.com

See you next year in Orlando, FL, June 19-22!

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