

TECHNICAL COLUMNS

Official archives of articles and columns written by Ron Hranac for Communications Technology and some of its sister publications, published by Access Intelligence, LLC. Reprinted with permission of the author.

By Ron Hranac, former Senior Technology Editor, Access Intelligence and Communications Technology Magazine

Originally appeared in the August 2004 issue of Communications Technology.

EXPO '04 SHOW PICKS

By RON HRANAC

Cable-Tec Expo 2004 has come and gone, and the show once again exceeded expectations. The exhibit hall was packed to the rafters the first two days, and the technical workshops I sat in on were well-attended.

Acterna sponsored the Arrival Night Reception, and instead of the usual mugs, company reps handed out some Mag Instrument mini-flashlights. Very nice.

The Annual Engineering Conference featured two top-notch panels, the first with industry CEOs, moderated by Paul Maxwell (I'm still trying to get used to seeing Jim Chiddix—one of the panelists and an SCTE Hall of Fame inductee—without a beard). The second panel featured industry CTOs and was moderated by Leslie Ellis.

But the best part of Expo is the superb technical workshops, along with the seemingly endless technology on display in the exhibit hall.

Expo Evening has always been fun, and this year was no exception. Held at Hard Rock Live in Universal Studios, attendees enjoyed refreshments, music and entertaining performances by celebrity look-alikes.

The closing night receptions put the ribbons (more on ribbons later) on a great Expo, with the usual camaraderie at the SCTE-List and Ham Radio Operators gatherings. Those were followed by the Loyal Order of the 704, which started off with a somber tribute industry giant Ken Simons, who passed away a week before Expo. Emcee Rex Porter announced the creation of a fund at The Cable Center in Ken's name, and it was seeded by auctioning off a rare 704A meter and Ken's briefcase along with reproductions of his original engineering notebooks.

And as usual, I managed to squeeze some time into an otherwise crazy schedule to wander the exhibit floor looking for interesting technology, gadgets and generally neat stuff. Here, in no particular order, are my Expo '04 picks.

Picks

Back for an encore appearance in my show picks, Rohde & Schwarz's FSH handheld 50-ohm spectrum analyzer (www.fsh.rohde-schwarz.com) caught my attention this year with a new option that supports vector transmission and reflection measurements, and the ability to display the results on a Smith chart. Way cool! Now, if we can just convince them to come up with a 75-ohm version!

PCI Technologies (www.atxnetworks.com) introduced its MAXNET II, a headend RF and optical management solution—think headend combiners/splitters and then some. What sets this apart from the original MAXNET is the use of MCX connectors and mini cables to accommodate greater wiring density in a small amount of rack space. In the same booth was PROTEX's re-enterable hardline connector and splice weatherproofing. Forget tools, torches and heat guns. These will be available by the time you read this.

Here's one of those "Why didn't someone think of that before?" gadgets. PPC (www.ppc-online.com) developed Drill Stop to foil signal thieves who drill out the core of a trap or filter so the drop cable's center

Official archives of articles and columns written by Ron Hranac for Communication Technology and some of its sister publications, published by Access Intelligence, LLC Reprinted with permission of the author.

conductor can pass through to the tap port. A trap or filter equipped with Drill Stop incorporates a special metal plate that prevents a drill bit from cutting through. This was demonstrated in the booth with a drill press and a selection of bits—yes, I tried it, and ruined a bit and the filter. When a cable thief does this, not only can the filter not be drilled through, but the bit is trashed and the filter permanently damaged. Drill Stop can be built in to any of PPC's standard traps and filters.

CommScope (www.commscope.com) has developed a new coaxial cable dielectric-to-center conductor bonding technique. Advanced Coring Technology eliminates the residual fuzz on P3 and QR hardline cables' center conductor when prepping the cable for connectors, yet meets industry requirements for center conductor bond strength, center conductor corrosion, water penetration, air transmission and dielectric shrinkback. The company claims ACT causes no change to the cable's velocity of propagation or attenuation characteristics.

My show favorite: Sunrise Telecom's (www.sunrisetelecom.com/broadband) upstream test equipment suite. It includes an add-on module for the CM1000 and the company's AT2500Qv spectrum analyzer. Here's what I like about this setup: The new module for the CM1000 transmits a simulated 3.2 MHz bandwidth 16-QAM (quadrature amplitude modulation) signal from anywhere in the outside plant, and that signal is received in the headend by the AT2500Qv. The AT2500Qv then displays pre- and post-FEC (forward error correction) bit error rate (BER), modulation error ratio (MER), group delay, in-channel frequency response, constellation and statistics, digital channel power, and so forth. Nice way to characterize the upstream on a per-channel basis! Availability is slated for early August.

Honorable mentions: Arcom's CPD Hunter (www.arcomlabs.com), Xtend Networks XMTS T1 Access Concentrator (www.xtendnetworks.com), and Holtzman Inc.'s Cable Clothespin Ranging Drop Tester (www.holtzmaninc.com).

Ribbons

OK, back to the ribbons I mentioned earlier. Jim Kuhns and I have had a running battle over the years to see who has the most ribbons on his Expo badge (Keith Hayes, Steve Allen, Steve Johnson and a couple others also play in this good-natured competition). This year, for the first time, I have to concede defeat. Jim technically had one more ribbon than me this year—if you don't count the now three-year-old "I'm Not Ron Hranac" ribbon that he keeps bringing back.

A tip of the hat to SCTE for another successful confab! See you next year at Cable-Tec Expo, June 14-17, in San Antonio.

Ron Hranac is technical leader, HFC Network Architectures, for Cisco Systems, and former senior technology editor for *Communications Technology*. Reach him at rhranac@aol.com.