Pages Hitch A Ride on the Information Superhighway

Zetron prides itself on making a range of paging equipment to suit applications of all different sizes from small desktop paging encoders, suitable for rural fire departments and small manufacturing campuses, to its flagship Model 2200 paging encoder designed to meet the needs of commercial PCP (Private Carrier Paging) operators. **Commtronix**, a two-way radio and private carrier paging company in Lake Village, Arkansas, is fully exploiting the entire range of Zetron’s paging equipment, providing everything from “town-wide” to “world-wide” paging coverage.

**For a good cause:**

In 1999, Commtronix donated a VHF repeater system to the local OES (Office of Emergency Services, a division of FEMA) and volunteer fire departments. Included in the equipment was a Zetron Model 5 Paging Encoder. The economical Model 5 is the lowest-priced desktop paging encoder on the market, yet offers more standard features than larger, more expensive encoders.

“Lake Village is a lake community,” explained Commtronix president and owner Tom Mosley. “The Police and Sheriff’s department dispatches are co-located at the Lake Village dispatch. We have one main Fire Department and two volunteer divisions. We use the Model 5 to group call and individually page out all the different departments within the OES group. They’re all separated by different capcodes, so we can do an all-call, group call, supervisor call, or an individual call.”

Mosley added that the Model 5 uses two-tone paging and is tied into the VHF repeater system, which gives it a coverage radius of roughly fifty miles.

**SoutherNetworking:**

Commtronix has been in business for ten years, and became a member of SoutherNet in 1995. SoutherNet is a non-profit corporation whereby paging operators across the south-eastern United States are linked together to form a wide-area, multi-state paging network. An article in the September, 1996 Advantage explained how SoutherNet members were using TNPP (Telocator Network Paging Protocol) and TDMA VSAT (Time Division Multiple Access, Very Small Aperture Terminal) to network their terminals together through a satellite link, rather than through telephone wirelines. SoutherNet members were among the first in the world to implement this satellite paging technology, which offers numerous benefits over wireline systems such as faster connect speeds and enhanced network resilience.

“... we were among the first to implement TNPP over a two-way satellite,” Mosley said. “After that we figured out that there was a way of doing it over the Internet at a much cheaper rate.”
Paging through the net:

But technology has moved on in the last four years. Since then, Commtronix and many other SoutherNet members have taken a step beyond satellite TNPP with the advent of TNPP paging over the Internet.

“SoutherNet has always been able to offer unlimited coverage because we were among the first to implement TNPP over a two-way satellite,” Mosley said. “After that we figured out that there was a way of doing it over the Internet at a much cheaper rate. We now have thirty-six members who are connected either via the Internet or two-way satellite. Some of us have mainframe, frame relays, and ISDN lines. At the moment, I’m just using standard dial-up lines. We’re only using 9600 baud, which is nothing in the scope of data transmissions over the Internet. It’s all compressed when it goes out and works great.

I sent a page out yesterday which reached Cumberland, Tennessee within three seconds.”

Greater flexibility than satellite paging:

Mosley adds that, not only is Internet TNPP paging much cheaper than satellite systems, it also has additional benefits, thanks to introduction of software specially created to handle TNPP paging.

“I use a custom software program created by a company called Comm One Systems,” Mosley explained. “The program provides TNPP filtering, so we can filter out certain source codes that we don’t want. The program will let you filter by source code, destination code, cap code, baud rate, POCSAG, GOLAY, or FLEX. It’s really neat software, and lets you unload the TNPP card by only allowing through what you want and trashcanning the rest. It also helps manage the processor speed on the 2200 Series paging terminal a little better.”

Reprinted from Zetron’s monthly newsletter, the Advantage, May 2000