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WIRELESS

City of Tampa, Super Bowl XLIII

An ENCOM "Then and Now" Success Story





Would destiny be in the Cards? Would the Steel Curtain once again descend on the Vince Lombardi Trophy? One thing was certain on Feb. 1, 2009 at Raymond James Stadium in Tampa, Fla. During one of the biggest spectacles in sports, Calgary's ENCOM Wireless was in the starting lineup—and failure was not an option.

The challengers

The Pittsburgh Steelers were looking for an NFL-record sixth Super Bowl ring. The Arizona Cardinals, a surprise entry on Super Sunday, hadn't won anything since the 1947 NFL title, when they were based in Chicago.

ENCOM Wireless, a dominant player in the field of industrial wireless communications, entered the big game with an onerous task—supplying the City of Tampa with an uninterrupted broadband network around Raymond James Stadium, enabling video surveillance for both security and traffic control.

Road to the show

The Steelers, an AFC powerhouse led by towering quarterback Ben Roethlisberger and a ferocious defence, sidelined San Diego and Baltimore in the playoffs for their second Super Bowl ticket in four years.

The Cardinals, with veteran gunslinger Kurt Warner in the pocket and rookie head coach Ken Whisenhunt in charge, caught fire in the post-season for the franchise's first Super Bowl berth.

ENCOM's own route to the big game went back eight months, when 10 of its industrial Ethernet radios—a combination of CommPAK BB 49 and CommPAK BB 49 INT units, operating on the 4.9 GHz frequency allocated for public safety applications—were installed around or near the stadium.

"It was a very clean and easy install for us," recalls Jeff Bohr of Florida Industrial Electric, which handled the installation of ENCOM equipment.

"The radios themselves installed very easily. We had no issues, really, as far as making the connection for the power and data, or for the lightning protection, anything like that. As far as the equipment was concerned, getting everything online and active, it went very well, very smooth."

—Jeff Bohr, Florida Industrial Electric

ENCOM's Ethernet wireless system was linked into the existing fiberoptic network at Raymond James Stadium, where it would be monitored by a traffic management centre within the stadium itself once the big day arrived.

Gary Strout, a supervisor in traffic engineering and design with the City of Tampa, says ENCOM's reliability and affordability, plus its offering of a wireless system on the 4.9 GHz public-safety band, made it the clear choice.

"In terms of cost comparison and construction time involved, (ENCOM) was by far the most reasonable option," says Strout.

"The basic infrastructure was already in place, so it minimized the actual time involved. This was literally a plug and play. And the frequency range I chose, of 4.9, gave us the possibility of zero interference."

—Gary Strout, City of Tampa



Get your game on

On the field, Super Bowl XLIII featured an ending every bit as dramatic and breathtaking as its predecessor, which had been considered by many as the best Super Bowl ever.

With only 35 seconds left, Steelers receiver Santonio Holmes kept his feet in bounds while stretching to make a six-yard circus TD catch—cementing a 27-23 Pittsburgh win over the upstart Cards.

Outside the stadium, where 70,774 fans were congregating and dispersing for America's biggest annual sporting event, ENCOM's team of robust, reliable and reputable Ethernet radios brought its 'A' game.

The ENCOM wireless network connected multiple remote camera sites to the traffic management centre within Raymond James Stadium, delivering high-resolution, full-motion, streaming colour video images with PTZ (pan tilt zoom) control.

ENCOM's CommPAK BB units provided the ultimate in smooth and crystal-clear video images, combining the latest in MPEG compression and state-of-the-art modem technology.

The camera systems use an encoding technology based on the MPEG4 standard, which enables interactive multimedia broadcasts, providing excellent video images with minimal Ethernet bandwidth consumption. Each camera, for example, uses one to four Mbps, while the ENCOM broadband network offers 54 Mbps.

The network supplied an uninterrupted picture for on-site city officials, allowing them to untangle traffic tie-ups within minutes.

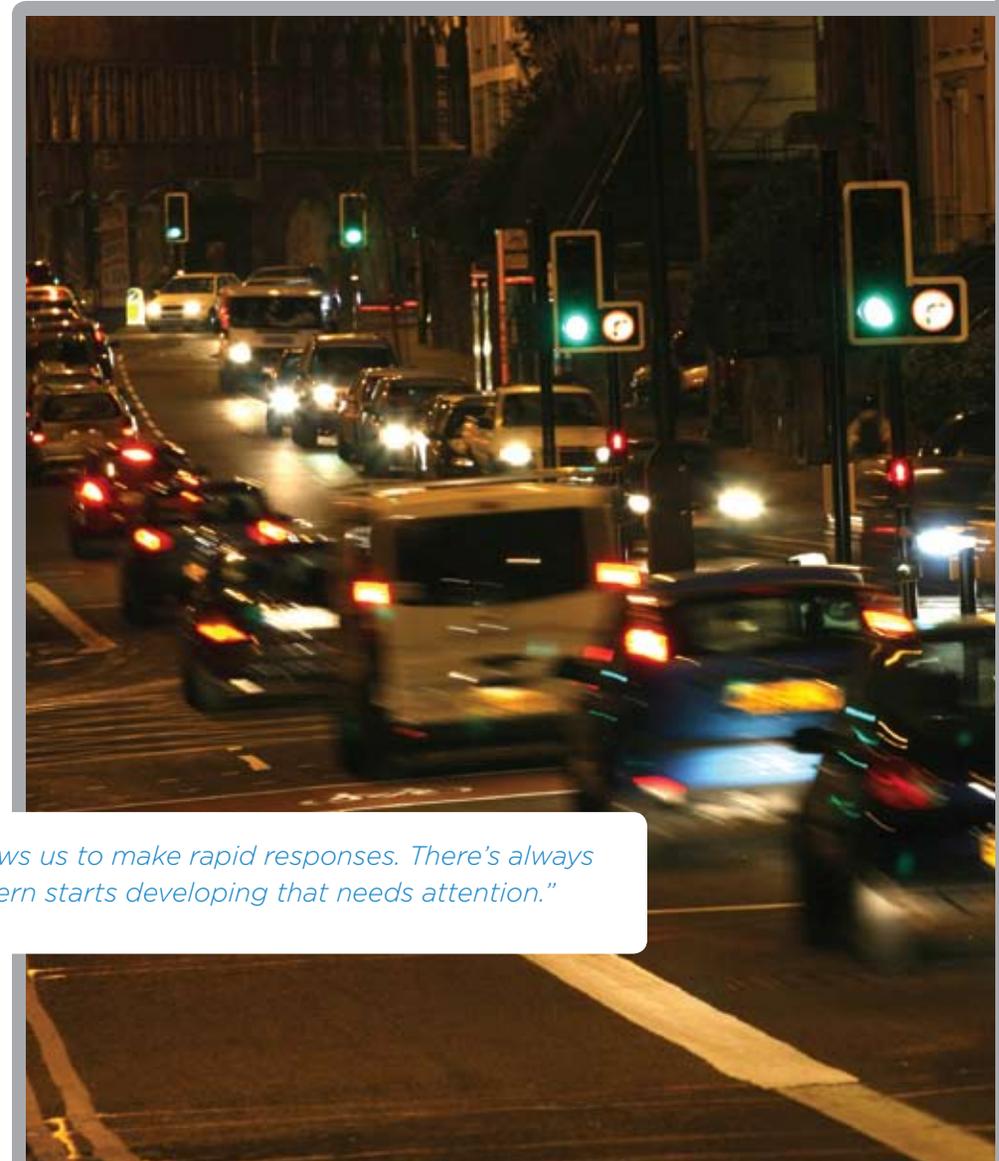
Tampa police and other law enforcement representatives also made use of the network, using the closed-circuit TV system for surveillance around the stadium.

"In the event of a major incident, with these cameras in place, their value to me is immeasurable, really—to be able to spot things, resolve certain issues," says Strout.

"When it comes to traffic monitoring, (the ENCOM wireless network) allows us to make rapid responses. There's always something—it could be every five minutes or every 15 minutes, but a pattern starts developing that needs attention."

—Gary Strout, City of Tampa

"If we see a problem, we have a direct connection with our traffic signals, so we can make a timing change within a matter of seconds," remarks Strout. "Without the cameras to facilitate that whole process, the situation could quickly get into a severe backup before it's noticed. To see that firsthand, to see a traffic problem get resolved within three or four minutes, it's pretty gratifying."



"We're extremely happy, As far as the system went, it performed flawlessly." —Gary Strout, City of Tampa



About ENCOM Wireless:

ENCOM, based in Calgary, Canada, provides field-proven, cost-effective wireless data solutions for municipal and industrial clients, with applications in the areas of:

- Intelligent transportation systems
- Public safety communications
- Municipal corporate security and IT networks
- Waste and water management
- Electrical utilities
- Oil and gas

Post-game analysis

A surprise Super Bowl entry like the Cardinals may well be a one-and-done story, but the ENCOM wireless broadband system is sticking around Raymond James Stadium.

The CCTV network will be activated every time a major event is held in the building.

"Just as an example, the event prior to the Super Bowl, called the NFL Experience, went on all week leading up to the game," says Strout. "The police have access to the network, and they monitored that event every day from 7 a.m. to 11 o'clock at night."

ENCOM is at the forefront of the migration to wireless Ethernet technology, and its wireless broadband network received rave reviews in Tampa.

"We're extremely happy, As far as the system went, it performed flawlessly." —Gary Strout, City of Tampa

Looking ahead

Sporting fans were clearly sold on Super Bowl XLIII, whose audience of 98.7 million viewers made it the most-watched Super Bowl in history—and the second-most-watched U.S. television program in history.

And it's fair to say that the City of Tampa is sold on ENCOM.

Plans are already in place to use the company's broadband radios elsewhere around the Gulf Coast burg.

"Would we use ENCOM's equipment again? Absolutely," says Strout. "We've already got two other segments where we need to maintain some communication—one for traffic signals, another for camera applications out in the far reaches of the city."

"So, yeah, we've definitely got plans to use ENCOM some more, that's for sure." —Gary Strout, City of Tampa



ENCOM Wireless
7, 640 - 42 Avenue NE
Calgary, AB Canada T2E 7J9
Phone: 403.230.1122
Fax: 403.276.9575
encom@encomwireless.com
encomwireless.com

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