

First Responders Go WiFi

Electrical Engineers Show Wireless Can Make a Difference in Emergencies

June 1, 2006 — For the first time, a wireless communication system is being tested in simulated emergencies. Dispatchers can locate responders with GPS and give them directions by text message. The system relies on wireless routers, which may be still available during a disaster even when cell phone towers are down.

PHILADELPHIA--In an emergency, seconds count. Wireless communication systems can help responders save lives. During 9/11, communication was challenging because the communications were destroyed in the attack. Researchers say a wireless system may be the answer.

"Hello. Drexel Public Safety."

A suspicious package is reported, and the Public Safety Command Center at Drexel University goes into action.

"Alright, Rich. Let's inform Bike Patrol One we've located it at the east entrance."

This is only a test, but this test could end up saving lives. For the first time, a wireless communication system is being used in a simulated emergency.

Using GPS technology, the dispatcher locates a patrol officer nearby and, instead of a radio, contacts the officer with a text message, giving directions based on the officer's location. The officer responds with his own personal digital assistant.

"It gets beyond just the voice data and really shares information about the situation with the individuals on the ground," says Bill Regli, of the Department of Computer Science at Drexel University.

The Dragon Force system incorporates information from cameras all over the university's campus that show the Command Center what's happening and where. It will be tested in the northeast this summer.

James Sim is President and COO of Drakontas, LLC in Glenside, Pennsylvania, the company that produces Dragon Force. "Now we have visual tools quite literally directing people exactly where they need to go, what they need to do," he tells DBIS. "They can make faster, better decisions based on the information that they can actually see and share with one another."

Because it's wireless like a laptop using broadband Internet access with a wireless router, Dragon Force wouldn't have been affected in the 9/11 attacks, when cell phone towers and police radios were destroyed.

"Dispatch Bike One and Foot Two."

"The new technology definitely makes me feel more comfortable in the situations if there'd be an attack or a

robbery," says Drexel University student Samantha Sheehan.

And at Drexel, future perfection of wireless emergency response is a real probability.

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