

## 911 radio system has flaws, some responders say

**The county said the new radio system's bugs are being worked on.**

By TED CZECH  
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Red Lion's Leo Fire Company Chief Dave Stump uses a radio inside his vehicle to communicate with other firefighters at a blaze at 28 S. Main St. in Red Lion on Wednesday. York County's Department of Emergency Services is now bringing on board a new dispatching system, which means new radios for all firefighters, and with them increased reception and range, said Brian Morrin, public information officer with York County's Office of Emergency Management. (DAILY RECORD / SUNDAY NEWS -- KATE PENN)

A fire chief pulls up to a burning section of row houses and needs more trucks and personnel.

Walking on fire-weakened floor, a firefighter falls partially through, his body wedged.

Two EMTs realize a patient is too combative to transport to the hospital.

In all of these situations, emergency responders use one tool -- their portable radio, which connects them to York County 911, as well as their fellow officers, firefighters or EMTs.

"The radio is our lifeline in today's world," West Manchester Township Fire Chief Dave Nichols said. "If we get into trouble, we need to have that lifeline to call for help. . . . Good communication is the key to a successful outcome."

But problems with that vital lifeline have surfaced as York County's 911 center is booting up a new dispatching system. Those problems -- such as lost or garbled transmissions -- have some county fire chiefs frustrated.

Radios have had to be re-programmed several times, chiefs say.

Joe Stevens, a paramedic at Yoe and fire chief at Union Fire Company, said it's like "buying a new car and sending it back for recall before you can even drive it."

The installation, which includes setting up software, erecting tower equipment and replacing portable radios, concludes with a "cut-over," during which agencies switch from the old analog system to the new digital system.

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The radio issues have pushed back the cut-over date more than once.

Nichols said that, as of earlier this week, it still had not been determined if many of the problems stemmed from the new batteries or new chargers.

"We're excited about the new system, but we're also frustrated that it's taking so long to be made available to us," he said.

Typical implementation?

Police departments, with the exception of York City Police, cut-over in early November. Pitfalls ensued, such as lapses in transmissions and the old system not being left running as a backup. But many of those have been dealt with, said Brian Morrin, public information officer with the county's Office of Emergency Management.

York County Department of Emergency Services Director Eric Bistline would comment on this story only through Morrin.

The county's fire companies, which outnumber police departments 3-to-1 and use their radios in different ways, have yet to transition to the new system. In fact, there was no new cut-over date as of Saturday.

In addition, firefighters' radios have been re-programmed with new software more than once.

With the cut-over date in limbo, firefighters and emergency workers are using the new system in

conjunction with the old one.

"On the new system, if we're using two (portables) at any one time, if one transmits, it seems to knock the other one off the system," said Ted Hake, chief of emergency medical services for Yoe Fire Company Ambulance Service Inc. "It seems that either the upper management or their consultants completely underestimated working with 22 police departments, 69 fire departments and 44 EMS agencies."

Morrin said the problems with the new system can be tied to its distributor and installer, M/A-Com, a division of Berwyn-based Tyco Electronics.

The problems, he said, were occasional and did not surface until the first cut-over, he said.

"We actually have M/A-Com folks here every day; they're committed to upholding their end of the contract," Morrin said. "They are working very aggressively to overcome these

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problems, working on holidays, working on weekends."

Steve Frackleton, spokesman for M/A-Com, said

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the problems with the system are akin to typical growing pains.

"For a system this size, yes, we're in the middle of a typical implementation program," he said.

Frackleton said if a problem is found, it is identified and tested in a controlled environment, and then M/A-Com works with the county to develop a solution.

#### Testing phase

For three months over the summer and fall, representatives from a host of police and fire agencies tested the system by taking portable radios into schools, nursing homes and hospitals -- places where there was a definite need for reception.

They were shooting for a 95 percent coverage countywide, 95 percent of the time, Morrin said.

"We actually exceeded that," he said. "The old system was down in the 60 percent range."

Fred Smeltzer, chief of the Wrightsville Fire Company, said his firefighters have had great reception with the new portables in areas where they previously had none, including River Road, north of the Accomac Inn.

"That's always been a problem area," where they'd have to radio Lancaster to get a message to York County 911.

Still, Morrin said recently, some problems didn't

come up until after the testing.

He breaks them into three main categories: portables, towers and batteries.

With portables -- as with cell phones -- as the user travels, the call is switched automatically from one tower to another, he said.

"We believe the signal strength is so good, the radio tries to access more than one zone (at one time)," Morrin said. "A portion of the transmission may be interrupted."

However, Morrin wrote in an e-mail Friday that the problem had been remedied, saying, "Programmers isolated the issue and made the necessary code changes."

On radio towers, Morrin said, there is a "timing issue" -- transmissions are being held instead of passed along -- causing them to drop out or sound like the user was speaking underwater.

Morrin wrote in his e-mail Friday that, on Thursday, two high-level systems programmers from Tyco arrived in York County to continue working on this issue.

On the battery issue, Stevens said the new system's nickel-cadmium portable batteries "can't make it through an entire shift."

Morrin said that, typically, fire companies would have to deal with M/A-Com on their own if they were having trouble with batteries and charger. In this case, the county is helping out, he said.

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Morrin said that, "Isolating the underlying cause has been a challenge."

Seeking a successful conclusion

York City Fire/Rescue Services Deputy Chief Steve Buffington said that, when he first heard of the new system, "I was probably one of the biggest nay-sayers . . . now I'm a convert."

The above-90 percent coverage is what did it for him.

"They've delivered that," he said.

Glitches in a new system are to be expected, and pushing back the cut-over date, rather than leaving problems unresolved, "was very responsible and looking out for our well-being," Buffington said.

Manchester Township Fire Chief Richard Shank, who acts as a liaison between York County 911 and the York County Fire Chiefs and Firefighters Association, said some of the resistance might stem from a fear of change.

"I'm not averse to change," Stevens said. "I really think the intent is correct . . . but the way we've gone about this has been very disappointing. . . . It's been less-than-user-friendly so far."

Morrin said he did not want the upgrade to the new system to cause what some might perceive as a feud between fire companies and the 911 Center.

"This is not an 'us versus them,'" he said. "We are committed to bringing a sound, solid, successful conclusion to this program."

[tczech@ydr.com](mailto:tczech@ydr.com) ; 771-2033.

### THE SYSTEM

Facts on York County's new 911 dispatching system:

Name: P-25 Trunk system

Manufacturer/installer: M/A-Com, a division of Tyco Electronics

Transition dates: York County police departments, Nov. 6-7; York City Police: Dec. 15; York County Fire/EMS: no date set

Coverage rate: During testing, the county strove to cover 95 percent of the county, 95 percent of the time. Morrin said they exceeded that. York City Deputy Fire Chief Steve Buffington estimates it's at 98 percent.

Number of portable and stationary radios: Portables (hand-held) 2,857; mobiles (vehicle-mounted) 1,021; base stations (in stations) 131.

Cost: \$36 million to purchase radios, equipment and install

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