

Digital radios tested for high-rise crises

FIRE DEPT. | Long-delayed \$22 million system is meant to avoid communications breakdowns

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After a lengthy delay that kept 2,100 portable radios in mothballs, the Chicago Fire Department is finally making the switch to a \$22 million digital radio system designed to prevent a repeat of communications breakdowns at a deadly Loop high-rise fire.

A six-week test -- put off until the city could reinforce or rebuild decades-old radio towers to handle heavy new equipment -- began this week to work out the kinks in the Motorola system.

Six teams of technicians and firefighters will conduct "on-the-street driving exercises" and "in-building testing" at dozens of public and private sites to make certain the shift from an analog radio system to digital would not compromise public safety.

"We really wanted to get the users' point of view," outgoing Fire Commissioner Ray Orozco said of the decision to involve fire personnel.

Fire Department spokesman Larry Langford refused to say when the new system would "go live." It depends on how smoothly the testing goes.

After evaluating 24 antenna sites, Motorola recommended that seven locations needed work -- everything from shortening or strengthening towers and removing unused antennas to installing air-conditioning for digital equipment.

An eighth tower -- at 31st and Sacramento -- was 50 years old and needed to be rebuilt. It was torn down and replaced on the same site.

Langford has called the digital radio system, announced in 2006, the "biggest upgrade in 25 years" to fire communications.

Police officers and firefighters will be able to communicate directly, instead of relying

on the cumbersome process of "console patching" by 911 center dispatchers. Firefighters and paramedics will use the same hand-held radios for the first time, instead of carrying two different radios to communicate directly.

The Motorola system will have more frequencies to handle heavy radio traffic. Some channels will be "encrypted" for security. And communication will be uninterrupted, even in high-rise buildings where service is notoriously sporadic.

With at least six fire ground frequencies instead of two, the new system should go a long way toward eliminating problems that plagued rescue efforts at the October 2003 fire at 69 W. Washington, when six people died after being trapped in a stairwell by locking doors.