Where Should We Send The Signals?

by Dean K. Wilson, P.E.

Question: As a contractor, for some time we have been installing remote supervising station fire alarm systems where the fire alarm signals transmit to the public fire service communications center and the supervisory signals and trouble signals transmit to a local answering service. The fire marshal tells us that the 2002 edition of NFPA 72 no longer permits this separation of signals. What gives?

The interpretation offered by the fire marshal follows the strict wording of the revisions made to the latest edition of NFPA 72-2002, *National Fire Alarm Code.* The Technical Committee on Supervising Station Fire Alarm Systems has modified Sections 8.4.2.1, 8.4.2.1.1, and 8.4.2.1.2 to seemingly require that fire alarm and supervisory signals transmit to the *same* location. In Section 8.4.2.2, the Committee has permitted trouble signals to transmit to some other constantly attended location.

Previous editions of the *Code* had linked the receipt of supervisory and trouble signals and permitted both of them to transmit to some other constantly attended location. A strict interpretation of these revised sections would not permit fire alarm and supervisory signals to transmit to separate locations.

The question remains, how will this affect the countless number of public fire service communications centers who have indicated that would willingly receive remote supervising station fire alarm signals, but have no interest in receiving supervisory signals or trouble signals? It

appears that this change to the *Code* will either force those centers to begin accepting supervisory signals for those locations where they receive fire alarm signals, or to stop receiving fire alarm signals and insist that the fire alarm signals transmit, along with supervisory signals, to another location acceptable to the Authority Having Jurisdiction.

In reviewing Proposal 72-382 in the *Report on Proposals* for the May, 2002 World Fire Safety Congress, it appears that this action by the Committee deliberately linked fire alarm signals and supervisory signals together. In his substantiation for this change, the submitter asserts that: "All model codes, including the *Uniform Fire Code* from the Western Fire Chiefs Association, allow remote station as an option for required monitoring of sprinkler system water flow and valve tamper signals. Proposed change will require remote stations to monitor supervisory signals to align with the requirements of the model codes."

Did the submitter of this proposal intend to link fire alarm signals and supervisory signals to the *same* receiving location? We spoke with him by telephone and had a lengthy and very profitable discussion regarding this matter. The submitter admits that in writing his proposed text he did not intend to require that the fire alarm signals and the supervisory signals transmit to the same location. However, he agrees that reading the text of the requirement very literally, an Authority Having Jurisdiction could certainly conclude that both types of signals must transmit to the same location. The submitter also agrees with us that some sound fire protection management reasons may well exist that would support such an interpretation of the requirement. We greatly appreciate the submitter's willingness to discuss this matter with us and certainly appreciate his efforts to write proposals to clarify portions of the *Code* which he feels need improvement.

From a practical fire protection standpoint, the problem remains that monitoring trouble signals at a separate constantly attended location from the location monitoring fire alarm and

supervisory signals introduces a potential disconnect in the flow of information. Trouble signals typically indicate the condition of the fire alarm system at the protected premises and the integrity of the communications pathway between the protected premises and the supervising station.

If the personnel in the remote supervising station do not know the status of the fire alarm system at the protected premises and the status of the interconnecting communications pathway, how can they have any confidence that they will receive the fire alarm and supervisory signals from that protected premises in a timely manner?

This perhaps will motivate a new proposal for the next edition of the *Code.* At this point, the Technical Correlating Committee for Signaling Systems for the Protection of Life and Property has requested and received approval from the Secretary of the NFPA Standards Council to enter the May, 2006 revision cycle. That would require the submission of the next round of public proposals by November 5, 2004.

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