The Joint Commission’s Approved Method for a Fire Alarm Manual Transmission System

LS.02.01.34 EP1 and LS.03.01.34, EP 1 require:

The fire alarm signal automatically transmits to one of the following (For full text and any exceptions, refer to NFPA 101-2000: 9.6.4):

- An auxiliary fire alarm system with direct connection to the servicing fire department as described in NFPA 72-1999: 6-16
- Central station service as described in NFPA 72-1999: 5-2
- A proprietary supervising station system as described in NFPA 72-1999: 5-3
- A remote supervising station fire alarm system as described in NFPA 72-1999: 5-4

The Joint Commission’s approved method for manually transmitting fire-alarm signals is explained in the following paragraphs.

Background

With the advent of new and more sophisticated telecommunications systems, traditional methods for transmitting fire-alarm signals to the local fire department have changed. In addition to technologic changes, many communities face financial constraints that are making it more difficult to fund and provide the staff to support fire department–based alarm centers. The result is that communities, fire departments, and health care organizations are seeking viable, cost effective alternatives to transmit fire-alarm signals.

Four Traditional Methods

Traditionally, The Joint Commission has expected organizations with buildings classified as health care and ambulatory health care occupancies to transmit fire-alarm signals to the local fire department in accordance with the provision of the National Fire Protection Association’s NFPA 101-2000, Life Safety Code® (LSC),* Section 9.6.4, “Emergency Forces Notification.”

This paragraph of the LSC identifies the following four means by which the fire-alarm signal may be transmitted to the fire department:

- Auxiliary alarm system: Direct connect to the fire department (NFPA 72-1999, Chapter 16-6)
- Central station connection: Management of signals by contracted service (NFPA 72-1999, Chapter 5-2)
- Proprietary system: Fire-alarm systems that serve contiguous and non-contiguous properties under one ownership with appropriately trained staff. (This option also includes the discussion below.) (NFPA 72-1999, Chapter 5-3)
- Remote station connection: Alarm monitoring center that sends signals to the public fire service communications center (NFPA 72-1999, Chapter 5-4)

The Joint Commission considers all four means to be effective and reliable methods to automatically transmit a fire-alarm signal to the fire department. When possible, The Joint Commission expects health care organizations to continue using one of the above methods.
However, for those organizations no longer able to use one of these traditional methods because of changes in their communities, the Joint Commission has approved an additional method of alarm transmissions that meet standards requirements.

**Manual Transmission System**

Prior to implementing this method, health care and ambulatory occupancies must first comply with each of the following requirements:

1. Fire-alarm signals must be received at a supervised location within the health care facility. Only a single, permanent, central location, such as a telecommunications center or a safety/security office, may be used. Multiple annunciator panels located throughout the facility may also be used. However, the “official” alarm receiving and transmitting location must be a single, permanent location.

2. The supervised location must never be left unattended. No staffing requirement is stipulated, but at least one person must be in attendance at all times. If personnel will be performing multiple job functions, it may be necessary to increase staffing. Responding to fire alarms must take precedence over all other assigned job functions.

3. The supervised location must be protected in the same manner as a “hazardous area,” referenced in NFPA 101-2000, Sections 18.3.2.1 and 19.3.2.1. This affords a basic level of protection to both the operators and the equipment at the supervised location. At a minimum, the supervised location must be in a totally enclosed room (or equivalent). If the room is not equipped with sprinklers, all walls, doors, and other penetrations into the room must have a one-hour fire resistance rating. If the room is equipped with sprinklers, the walls, doors, and other penetrations into the room may be unrated assemblies but must prevent the transmission of smoke into the room.

4. The supervised location must contain the appropriate equipment to receive first alarm signals. The equipment may be either the master fire-alarm control panel or an auxiliary annunciator panel. Annunciator panels must be at least as capable of identifying the location and type of alarm as the master fire-alarm control panel. When a fire-alarm signal is received at the supervised location, it must activate both a visual and audible signal at that location. The signal must be clearly distinguishable as the fire-alarm signal and must be seen and heard above all other alarms or signals received at that location.

5. A log that records all status changes to the fire-alarm system must be maintained in the supervised location. The log may be recorded either manually or with an automatic data recorder integrated with the fire-alarm system.

6. Alarm signals received at the supervised location must be immediately transmitted to the fire department. At no time may a transmission of alarms be delayed while other personnel verify or investigate fire-alarm signals. Fire-alarm signals may be transmitted to the fire department via telephone, two-way radio, master (city) box, or any other means of communication acceptable to the local authority.

7. The supervised location must contain a master copy of the organization-wide fire plan and any other documents, equipment, or records necessary for the operators to implement, coordinate, or direct activities related to a fire emergency response.

The intent of these requirements is to codify expected organization practices. When implemented, these practices can be used as an effective and reliable alternative method of transmitting fire-alarm signals to the local fire department. In addition to compliance with the Life Safety Code, the Joint Commission
expects all accredited health organizations to be in full compliance with state and local fire codes. Organizations that may benefit from using the described alternative method should verify its acceptance by local fire officials.