Highlights of the New NFPA 72-2002 - Part 5 by Dean K. Wilson, P.E.

The NFPA Standards Council has recently released NFPA 72-2002, *National Fire Alarm Code*, with an effective date of August 8, 2002. In the last four issues of *IMSA Journal*, I have been giving you my summary of the most significant changes to the *Code*. That summary continues in this issue, as well.

Chapter 9, Public Fire Alarm Reporting Systems, covers the material formerly included in Chapter 6 in the 1999 edition. In many places throughout this Chapter where the 1999 edition used the term "communications center," the Committee has revised the text to use the term "public fire service communications center." This change occurs so often, that where this is the only change made to a Section, we will not take note of every particular section.

Unfortunately, the Committee chose to make most of their revisions within the context of a single committee proposal and a single committee comment in the *Report on Proposal* and the *Report on Comments*, respectively. Unfortunately, the Committee offered as substantiation for their changes only that the changes were made to meet the requirements of the NFPA *Manual of Style*. This means that the technical justification for several substantive changes was not provided.

The Committee has revised the entire Section on application to provide greater clarity.

(Please refer to Section 9.1)

The Committee has added a new requirement to ensure that records of maintenance performed by persons other than employees of the controlling jurisdiction will be forwarded to a designated employee of the jurisdiction as soon as possible. (Please refer to Section 9.3.3)

The Committee has revised the Section on alarm transmission equipment to clarify the intent of the requirements. They have also revised the requirements for the visibility of street boxes to improve the clarity of the requirements. (Please refer to Sections 9.4, 9.4.2.1.8, 9.4.2.1.9, and 9.4.2.10)

The Committee has slightly reworded a number of Sections relating to coded radio street boxes to either clarify the requirements or meet the NFPA *Manual of Style*. (Please refer to Sections 9.4.2.3.3, 9.4.2.3.4, 9.4.2.3.5, 9.4.2.3.8, 9.4.2.3.9.5, 9.4.2.3.9.6, 9.4.2.3.10.2, 9.4.2.3.10.4, 9.4.2.3.10.5, 9.4.2.3.12.1, and 9.4.2.3.12.2)

The Committee has moved the Section covering auxiliary fire alarm systems to a more forward place in the Chapter. The Committee has added a new requirement for local energy type auxiliary systems that transmitter trouble signals shall be annunciated at the fire command center. (Please refer to Section 9.4.3.2.1(1)(c))

The Committee has removed the Section that appeared as 1999 Section 6-16.2.3. This Section previously required that an auxiliary fire alarm system be maintained and supervised by a responsible person or corporation. We presume that since a similar requirement exists in Chapter 10, the Committee chose to remove it here. (Please refer to the Section deletion mark after Section 8.4.3.3.10)

The Committee has added a new Section covering multizone auxiliary fire alarm systems. This Section requires a means for transmitting an alarm to the public fire service communications center upon subsequent actuation of initiating devices on other initiating device circuits, or subsequent actuation of addressable initiating devices. (Please refer to Section 9.4.3.3.12)

The Committee has deleted a requirement for communications center facilities. This appeared as 1999 Section 6-16.3. It appears as if the Committee considered this requirement redundant.

The Committee has revised the requirements for visual recording devices at the public fire service communications center to require a minimum of 1 backup device. The Committee has made other minor changes to conform to the NFPA *Manual of Style*. (Please refer to Section 9.5.1.2)

The Committee has revised the entire power supply section to conform to the NFPA *Manual of Style* and to provide greater clarity. In addition, instead of providing details regarding generators, as it has in previous editions, the Committee has referenced other related NFPA documents that already provide such requirements. (Please refer to Sections 9.5.1.5, 9.5.1.6, 9.5.1.7, and 9.5.1.8)

The Committee has revised the sections covering coded radio reporting systems, remote receiving equipment, and public cable plant to conform to the NFPA *Manual of Style*. Most of these changes consist of minor rewordings and reorganization. (Please refer to Sections 9.5.3, 9.6, and 9.7)

Chapter 10, Inspection, Testing, and Maintenance, covers the requirements formerly contained in Chapter 7 in the 1999 edition.

The Committee has revised the opening Sections of this Chapter to reflect the NFPA *Manual of Style*. They have included a Section on impairments and have referenced similar requirements in Chapter 4. (Please refer to Sections 10.1 and 10.2.1.2)

The Committee has deleted the 1999 Section 7-1.1.3 that dealt with alternate test methods. (Please refer to the Section deletion mark after Section 10.2.1.2(C))

The Committee has revised the headings and reorganized the order in which they present the material in the Chapter. The Committee now titles the 1999 Section "System Testing" as simply "Testing." They now title the 1999 Section "Inspection and Testing Frequency" as "Inspection." The Committee has reordered the material to present "Inspection" first, followed by "Testing." Within "Testing" they have included "Initial Acceptance Testing," "Reacceptance Testing," "Test Methods," and "Testing Frequency." (Please refer to Sections 10.3, 10.4, 10.4.1.1, 10.4.1.2, 10.4.2, and 10.4.3)

The Committee has revised the format of the three Tables that cover Visual Inspection Frequencies, Test Methods, and Testing Frequencies. In addition, the Committee has made some minor changes to the content of these Tables. (Please refer to Table 10.3.1, Table 10.4.2.2, and Table 10.4.3)

In the Table on Test Methods, they have added requirements that describe the test method for "supervision" under "11. Conductors — Metallic." They have also added requirements that describe the test method for "single- and multiple-station heat alarms" under "13. Initiating Devices (d) Heat detectors." They have revised the requirements for "system detectors" under "13. Initiating Device (g) Smoke detectors" to include "single-station smoke alarms used in other than one- and two-family dwellings." In the Section covering "14. Alarm Notification Appliances," the Committee has added requirements to reference the use of ANSI S3.41, *American National Standard Audible Evacuation Signal*. They have also added a footnote that provides references for test methods relating to intelligibility. (Please refer to Table 10.4.2.2)

In the Table on Testing Frequencies, the Committee has revised the testing frequencies for batteries by dividing the information into three parts: "5. Batteries — Central Station Facilities," "6. Batteries — Fire Alarm Systems," and "7. Batteries — Public Fire Alarm Reporting Systems."

They have also added a requirement to replace lead-acid batteries within 5 years after manufacture, or more frequently as needed. Under the requirements for "15. Initiating Devices," the Committee has divided the requirements for smoke detectors into "system smoke detectors" and "single- and multiple-station smoke alarms." They have also added requirements for "single- and multiple-station heat alarms." (Please refer to Table 10.4.3)

The Committee has added a new Section covering the requirements for Single- and Multiple-Station Smoke Alarms and for Household Fire Alarm Systems. (Please refer to Sections 10.4.4 and 10.4.5)

The Committee has added a requirement for software-based fire alarm systems, that a copy of the site-specific software must be given to the owner's designated representative. (Please refer to Section 10.6.1.2)

The Committee has revised the Section covering "Maintenance, Inspection, and Testing Records" to provide clarity. They have also added a Section that requires the records medium to survive for the duration of the retention period. They have clarified that the records of testing are not permanent, but rather must be retained only for the specified period. (Please refer to Sections 10.6.2, 10.6.2.2, and 10.6.2.3)

The Committee has revised the "Inspection and Testing Form" to provide clarity. (Please refer to Figure 10.6.2.3)

Next issue, I will continue to offer my summary of the important changes to NFPA 72-2002, *National Fire Alarm Code*, by presenting the changes to Chapters 11.

Fire Alarm Notebook by Dean K. Wilson. P.E. *IMSA Journal* November/December 2003

Page 6

IMSA member Dean K. Wilson, P.E., C.F.P.S., works as a Senior Engineer in the Erie (PA.) office of the fire protection engineering and code consulting firm, Hughes Associates, Inc. (www.haifire.com.). The opinions expressed in this article are strictly his own. You can reach him by e-mail at dwilson@haifire.com or by telephone at 814-897-0827.