



## January 2013 – Webinar Questions and Answers NFPA 2013 – Are You Ready?

Presented By: Jack Poole, FPE

The recorded webinar along with copy of the presentation used can be found on [webinar](#) section of Fire-Lite's website.

1. Does 2013 address the issue of UL 2196 being revoked, thus removing the use of CI cable for 2-hour rated circuit integrity?
  - a. No.
2. What document or code should I use to determine if a customer site needs a commercially rated fire system? For example can I use a residential system in a location like a 500 sq foot pizza place? The local jurisdiction usually relies on my advice. In many cases I suggest a commercial fire system only to find out that one of my competitors placed a residential system in the location.
  - a. *The systems shall be installed in accordance with their listing/approvals. It is my understanding that systems listed for Residential use cannot be used in commercial occupancies, but I believe a commercial system can be used for residential systems.*
3. Can a printed out copy of the program be used for the Site Specific Software requirement?
  - a. No. *The intent is to provide the actual software electronically.*
4. Slide 22 - 7.5.8: The design engineer is not an impartial 3rd party. Please clarify.
  - a. *If the AHJ requires an independent 3<sup>rd</sup> party reviewer (engineer), then that engineer should not be the engineer that designed and approved the system. Keep in mind that this section is intended to give the AHJ the authority for them to require a 3<sup>rd</sup> Party Engineer be hired if they may not have the knowledge on the system – basically a 3<sup>rd</sup> Party Engineer to serve as their representative. The design engineer should be a PE (as required by most states), since FA design is consider the "Practice of Engineering". The design engineer is typically considered the "Engineer of Record" and that Engineer of Record should be present for all testing to make sure the system was installed as he design, since the Engineer of Record has liability for the system. The 3<sup>rd</sup> Party Engineer and the Engineer of Record should not be the same guy.*
5. Can you comment on the new requirement for voice evac to also include the new amber strobe lights? Does notification require information from a remote location such as dispatch other than the remote microphone at the FACP?
  - a. *Fire Voice Evac systems are not required to have amber strobe lights per NFPA 72. Given the results of the required Risk Analysis to be performed for a "Mass Notification System", the results of the Risk Analysis may require amber strobes. In summary, amber strobes are only required if driven by the Risk Analysis. Please note that UFC 4-021-01 required amber strobes for Army and Air Force systems. No, the notification is not required to be performed from a remote location such as dispatch. This might also be a result of the Risk Analysis.*
6. Does a NAC panel require a smoke detector above the unit itself?
  - a. Yes – See NFPA 72 (2013) Paragraph 10.4.4
7. Some panel manufactures have a comparison program to confirm changes and eliminate the 10% test. Does Fire-Lite?
  - a. *PS Tools programming software has a **Compare Configuration** option shows the differences in fire panel configurations for two different customers or two different configurations for the same customer.*
8. How can you recall an elevator when the sprinkler is activated in the pit when ANSI requires the power to the elevator to be disconnected upon the event of the sprinkler in the shaft activating?
  - a. *A smoke detector is required to do the recall and a heat detector (or a zero time delay waterflow switch) is required to shunt the power. It is expected that the smoke detector will activate prior to the heat detector or waterflow switch.*
9. Should we be selling more speakers than smoke detectors now?
  - a. *Smoke detectors are driven by code requirements in occupancies that require early warning such as residential, hospitals and prisons, just to name a few. Most fully sprinkler buildings do not require smoke detection – install smoke detection when required by code. Since the cost different between a speak and*

*a horn is minimal, it is recommended that speakers be used to provide live voice announcements and the system can be used for other uses.*

10. How do we achieve the various levels of survivability with the UL issue associated with CI cable?
  - a. *Yes, UL Listed CI cable typically meets the requirements of 2 hour survivability; however, there has been some UL Listing issues with CI cable, so please confirm that the cable is UL Listing and the listing is valid.*
11. Where a device is added to a system and the program is downloaded (sent to) the panel to add the device is only 10% required to be tested even though the entire database was re-installed?
  - a. *It would require you to test that new device and 10% of the system.*
12. Did I understand you to say that occupant notification is not required in enclosed exit stairways?
  - a. *Yes, see NFPA 72 (2013) Paragraph 24.4.2.6 - The evacuation signal shall not operate in elevator cars, exit stair enclosures and exit passageways.*
13. As so often happens, replacing of a fire alarm system head-end only, using all existing field devices and appliances, what documentation is standard at that point??
  - a. *At the end of the head end replacement, I would expect that all documentation as required by Chapter 7 be provided. Hopefully the original installing contractor provided the required documentation, so the documentation task required for the new head-end should be minimum updating.*
14. The 50 device max on broken circuits: Is that from the panel or from the terminal can?
  - a. *From the panel as I understand it on an SLC.*
15. When will the 2013 code go in to effect?
  - a. *Whenever an organization (federal organization, State, County, City, or other authority organization) official adopts it.*
16. Does the new testing interval apply to existing fire alarm systems or just newly installed systems?
  - a. *See NFPA 72 (2013) Paragraph 14.1.4 – applies to new and existing.*
17. Is Jack Poole or Fire-Lite planning to give a webinar on NFPA 101 to summarize where Fire Alarms and MNS are required?
  - a. *Not at this time, but it would be a good topic for a future webinar.*
18. If my AHJ has not adopted 2013 NFPA 72, should we as installers monitor our systems every 6 hours or stay at 24 hour monitoring?
  - a. *As a MINIMUM, our suggestion is to follow the code that has been adopted and applicable. However, it is noted that more frequent monitoring would be an advantage to the owner and occupant of the facility.*
19. Does 2013 have any specific "improvements" to reduce unwanted alarms, if so can you comment?
  - a. *Changes have been made in Chapter 26, "Supervising Station Alarm Systems," to address alarm signal verification, alarm signal content, and restoration of signals. These changes have been made in part to help emergency responders better manage issues related to unwanted alarms. In addition, new definitions for unwanted alarms have been added to more precisely identify the sources of these alarms. Changes have also been made to update the communications methods addressed in Chapter 26. Among these are changes to the supervision interval requirements for communications paths and changes to the types of transmission means that can be used for the second channel of a DACT. Additionally, see NFPA 72 (2013) Paragraph 10.22, 17.9.3.2, and 17.9.4.2.*
20. If the exit enclosure is connected to the exit passageway to extend to the exterior, should they be on the same notification zone?
  - a. *In our opinion yes.*
21. Can you review the 24 hour test report change?
  - a. *See NFPA 72 (2013) Paragraphs 26.6.2.4.4(2), 26.6.3.1.6, 26.6.3.2.1.4, and 26.6.3.2.1.5.*
22. What are POTS lines? Please clarify.
  - a. *Plain Old Telephone Service lines*
23. Does NFPA 72 2013 go into other technologies for communication to supervising station? Back up UPS for Internet how many hours to be backed up? Modem and router?
  - a. *Yes – there are other approved methods for communication.*
24. As built drawings are usually not ready at the time of inspection. Is there a time frame that is acceptable to have them to the owner?
  - a. *The code does not specific a time – it just requires them be provided. Providing at the time of final inspections is an advantage, even if they are red-line mark-ups, that way they can be verified during the final inspection and walk-through.*
25. Will the 2013 edition require 2 different types of communication? (i.e. POTS + IP communicator)
  - a. *No – See Chapter 26.*
26. Who is responsible for defining various ADS's?

- a. *The design professional – typically the Engineer of Record.*
27. The location of relays for door holder control do they have to be 3' from holders or located in a common room?
- a. *Yes per NFPA 72 (2013) Paragraph 21.2.4\* Emergency control function interface devices shall be located within 3 ft (1 m) of the component controlling the emergency control function.*
28. Does the code include how to properly indicate and label fire alarm electrical systems? Or would NFPA 70 be the appropriate code to reference?
- a. *Chapter 7 provides the documentation requirements for all systems and NFPA 70 is also an applicable reference on how to indicate and label systems and their components.*
29. You were talking about a minimum requirement for techs to work on fire alarm. What do you think the minimum req. should be?
- a. *My personal opinion for the personnel installing (installing wiring and connecting devices and appliances should be NICET Level II in fire alarm and the personnel wiring the panel and doing the programming should be a minimum of NICET Level III in fire alarm and certified by the manufacturer.*
30. Some panel manufactures have a comparison program to confirm changes in programs to eliminate the 10% test is that acceptable?
- a. *No.*
31. Most of the consulting engineering community uses their own symbols-is there an effort to have them standardize on the NFPA symbols?
- a. *Yes. NFPA 170 is a nationally recognized standard, it should be utilized. NFPA 72 (2013) Paragraph 7.2.3 requires the use of NFPA 170, unless the AHJ approves otherwise.*
32. Are shop drawings considered the engineered drawings or contractor marked up drawings
- a. *There are considered a "design" document and classified as an engineered drawing.*
33. In the implementation of tying onto other building systems ie: tank levels, which comes with its own monitoring equipment, are initiating devices going to be required above all of those panels?
- a. *Yes if it is a fire alarm control unit. According to NFPA 72 (2013) Paragraph 10.4.4, In areas that are not continuously occupied, automatic smoke detection shall be provided at the location of each fire alarm control unit(s), notification appliance circuit power extenders, and supervising station transmitting equipment to provide notification of fire at that location.*
34. Would a carbon monoxide detector activation bet treated as an alarm (sound the building alarm signals and alarm signal to central station) or supervisory condition?
- a. *A CO signal can be an alarm signal, but must be a different signal than the fire alarm. A CO alarm should not override a smoke detector alarm signal. See NFPA 72 (2013) Paragraph 21.7.6 and 23.8.4.8.*
35. If you do a speaker system for notification are you going to be able to use more than one language via English / Spanish or other languages
- a. *Yes. Messages can be recorded with multiple languages. The sequence could be: Alert Tone, English message, then Spanish message, then repeat.*
36. What is the future of POTS lines for primary and secondary dialer circuits?
- a. *I think over time they will be replaced by other communication methods, but that is a personal opinion.*
37. Where an engineering firm has provided a specification and fire alarm plans for bidding purposes would that firm be considered the designer?
- a. *Every fire alarm project should have a Engineer of Record. The Engineer of Record is the designer of record if those are the words used in your jurisdiction. The design engineer/EOR should be a PE (as required by most states), since FA design is consider the "Practice of Engineering". The EOR is one licensed as a Design Professional according to the State Board of Technical Professionals (of the respective state for which the work is being performed), and that EOR must have Education and Experience in which he is practicing. So the controversial question is: can and electrical engineer design fire alarm systems and PE stamp them – only if he can display adequate education and experience. The design engineer/EOR should perform the design, be present for all testing to make sure the system was installed as designed, since the design engineer/EOR has liability for the system.*
38. If an engineer company designs a fire system on the 2002 code and we, the state, are using 2010 how do you handle this?
- a. *If the State has adopted the 2010, then the state needs to enforce the requirements of the 2010 code and make the engineering company follow the 2010 edition. See question 39 above. The State also needs to enforce using qualified designers and EORs. Make sure the people doing the design of FA systems are truly qualified and have adequate education and experience.*
39. Do you have an opinion on the Odeon audible design software for laying out speakers on a fire alarm system? If not, do you have an opinion on any other design tools for speaker layout?

- a. *I am not familiar with Odeon software. I am familiar with the software made available through System Sensor (a version of EASE) and also the EASE software. In my opinion they are both very good products and predict audibility and intelligibility very well – a very good design tool.*
40. How do I convince an architect that a building does not need horns in every office in a class B occupancy?
- a. *First tell an architect he does not have education and experience for performing fire alarm design – turn him in to the Board of Technical Professions. Follow the guidance and criteria in NFPA 72 (2013), including the annex and Handbook. Not every Acoustically Distinguishable Space (ADS) need audibility or intelligibility. If doing a Risk Analysis per Chapter 24 on NFPA 72 (2013), the stakeholders should determine which ADS's need audibility and intelligibility and to what level.*
41. Is there potential for additional licensing going to be required for companies that are currently strictly fire alarm system installers??
- a. *If you mean for doing Mass Notification or Emergency Communication System, I do not foresee that at this time.*
42. If fire systems are going towards speakers, would that require shielded cable?
- a. *It depends on the requirements of each individual manufacturer. Follow the Installation Instruction and wire guidelines for the equipment being installed.*
43. Is an FPE letter to be required for every test and inspection outside of new system installations?
- a. *As stated in some previous answers to questions above, every project should have an Engineer of Record (EOR) and that EOR should be involved in the design of the system and see it all the way through construction, including the final testing. Ultimately the EOR has the design/installation liability, they should make sure the installation complies with their design.*
44. What is a minimum requirement of fire protection in a single store building?
- a. *Not every building needs fire protection. There are many more questions to be asked to determine the "minimum requirement for fire protection". What are the applicable codes and standards to be followed, what is the occupancy, what is the construction type, does the owner want an emergency communication or mass notification system, what does the risk analysis require, ....? These are the questions that the Engineer of Record should be determining.*

**Please note:**

While we have tried to answer your questions as fully as possible there are some questions that need a more detailed answer. If you have questions regarding what was heard in this webinar here are some contacts to reach out to: For NFPA & Code related questions please contact Jack Poole via his [website](#) or by email at [jpoole@poolefire.com](mailto:jpoole@poolefire.com). Fire-Lite Alarms Technical Support is available for brand specific questions. Fire-Lite Tech can be reached [online](#), via email at [firelite.tech@honeywell.com](mailto:firelite.tech@honeywell.com) or by calling 1-800-627-3473, Monday – Friday, from 8 am to 7 pm ET.