# What's Happening on the Code Front?

By Scott Edwards

Probably the most important change that is happening within the Fire/Life Safety Codes and Standards arena is the 9<sup>th</sup> Edition of UL864. The important question is this: have you heard of the changes?

For those not familiar with specific UL Standards, this particular standard deals with the listing of Fire Alarm Control Units (FACP). The important event unfolded on December 31, 2008 is that all UL864 panels must be compatibility



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listed with signaling appliances used on the panel from this date forward. Some may be saying that this is already happening or is already being practiced. Not true! There has never been a compatibility requirement by either NFPA (National Fire Protection Association) or any nationally recognized testing laboratory. The only requirement for compatibility listing prior to this change was the listing of two wire smoke detectors. The only listing for notification appliances was that a panel manufacturer was required to submit a notification appliance to the testing laboratory to indicate that the notification circuit was indeed functional.

So why are we changing now? What was broken that needed fixing? Some said that strobe lights were overloading their control units' power supply. Some were saying that the strobe lights simply didn't work. Still others said that the strobe lights were being damaged. As a manufacturer of strobe lights, I can tell you this: the number of units that were returned because of electrical damage won't even fill up the back of one of those new Smart cars.

### **REAL-LIFE APPLICATION**

What does this mean to facility managers and building owners? Let's first start by looking at when you decide to put an addition on a facility. If you replace the panel, then all signals down stream from the panel will also have to be replaced because now they are no longer "compatibility" listed with the new panel you just installed. Even if the signals are still functional, they won't be listed with the new panel, and therefore the AHJ (authority having jurisdiction) will not allow their use. That is probably the biggest obstacle facing the building owners and managers out there today. Change a panel and you are now required by code/ standard to change all signals because they are no longer compatibility listed with the panel. Seems like a waste!

We have been trying to get a code change into UL864 that would require that all panels have at least one regulated circuit. With one regulated circuit you would be able to use an extender panel and use all the legacy signals that are currently in place. However, we have been running into opposition from some panel manufacturers that listed all their control units to the special application criteria. This special application listing was misused, and we have been told by one of the listing laboratories that they didn't anticipate the manufacturers of panel to list to special applications as they did.

But seriously, what better way to limit what you can use on a panel? You may not have the choices you once had; this may have an adverse effect on commerce and obviously be more costly to building owners and facility managers. If we go back to the genesis of this issue we can see that prior to the ADA requirements, signals (especially strobe lights) made up less than 10 percent of any fire alarm installation. Now with the new requirements for ADA, not only are we installing more appliances, but we are also installing appliances that draw more current. So was there an issue? Or did we just create one?

#### **NEW REQUIREMENTS**

Another change coming in the National Fire Alarm Code deals with intelligibility testing. The important thing to remember here is the subject based testing will still be one of the options for you to use. NFPA has done a lot of research on intelligibility testing and we commend them for that research. As we use more and more speaker systems in our facilities we should make sure we can understand what the message is when it is transmitted. Chapter 7 of NFPA 72 will have new criteria for testing and placement of speakers included in their chapter. There is also a new appendix document which will help with the installation of speakers to meet the requirements for an intelligible communication system.

New this year in the NFPA Fire Alarm Code is the chapter on Emergency Communication System requirements (Chapter 12), formerly known as Mass Notification Systems. This is a new chapter to NFPA 72. A lot of work has gone into this new chapter and with anything new we must work through all of the bugs as these new requirements come into being. For example there is already a controversy over whether the amber strobes used to alert the occupants to an event (other than fire) need to be polar plotted as white or clear lens strobes listed to UL 1971. There are positives and negatives to requiring these amber colored strobes to be polar plotted. One huge negative will be the current draw increase which equates to more batteries, and more batteries mean more expensive systems. On the positive side, if you want to go that route would be that these appliances would meet the same light distribution as the white light units for the hearing impaired.

There is also a new requirement coming out for the Hard of Hearing (HOH). This will be that a 520HZ square wave signal exist in the rooms that are occupied by hard of hearing individuals. We believe that the Single and Multiple Station Committee in NFPA 72 indicated that wherever the hearing impaired rooms are, they will also be equipped with an appliance meeting this new requirement. So we believe it is only a certain percentage of rooms that will require this new appliance. As you all probably are aware from NFPA 720, Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment was recently released. Along with the NFPA Standard it is our understanding that the International Residential Code also adopted the requirements for CO detection in Section 313. Also regarding the International Residential Code, and probably not that important to facility managers, they recently adopted the requirements that all new one to two family dwellings be installed with a sprinkler system in accordance with NFPA 13D.

Stay tuned as there are many issues taking place every day! (5)

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