

If It Ain't Broke, Fix It Anyway



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Last month I talked about how actions and inactions can create potential liability for the fire service. You've undoubtedly heard the phrase, "If it ain't broke, don't fix it." There is a corollary to that phrase: If it's broke when you need it — it doesn't exist.

That is why we ought to consider maintenance of fire-prevention systems a firefighter safety issue. We can't just install sprinkler systems and hope for the best. There is a concept called "graceful degradation" that comes into play here. It describes the day-to-day and often insignificant things that begin to go wrong with a system. Taken as individual problems, they may not compromise the system's performance. But over time, these minor problems can accumulate to the point where they will cause failure. And, when do you think they are likely to fail the most catastrophically? Right — just when we have a fire. Graceful degradation is not to be taken for granted. The longer a system is allowed to experience a lack of maintenance, the greater the potential for failure.

Let me give you another word for failure — malfunction. Tiny details can lead to a malfunction that can render an entire system useless. And, when a firefighter is his into a burning structure, he is not going to have the time, the tools or the inclination to fix something that isn't working. Making matters worse, that same firefighter is going to have to figure out a workaround solution at the worst-possible time, when every second counts.

What do you know about the care and maintenance of all the systems that you have mandated in your jurisdiction? Are they inspected on an annual basis? If you have an active and effective code-enforcement program, it is likely that you have caught those minor discrepancies. But if your program is intermittent or superficial, then the possibility of potential malfunctions begins to occur.

I have two suggestions for you to follow. The first is to start this process during initial plan check. The more complicated the installation, the more you should focus upon the game plan to ensure its reliance

in the future. Work closely with the building owners to motivate them to ensure that the system is functional all of the time — not just for the annual inspection.

As mentioned last month, make sure that any fire-protection system that you have installed has an adequate record-keeping system. It is vital to know when and where the system has been tested, certified and validated by third-party organizations. The next step is to make absolutely sure that your fire suppression crews are up to date with what has been installed in your buildings and know exactly how to use the system when it is activated. Their preplans should include contingencies that will be invoked when a system malfunction occurs.

These two actions are like two sides of the same coin. One does not assure reliability without the other. Failure to maintain any system increases its possibility of failure. Failure to use a system properly increases the possibility of failure, too.

If you want to see anybody get excited at the scene of a fire, then let something that the firefighters thought was going to be there to help them not work. A hydrant with no water can cause a major reaction. A standpipe that is damaged can turn an offense into a defense in a heartbeat. Encounter a fire door that is blocked open and then watch the fireworks ensue. Once things start to go wrong, the usual direction for the whole operation is downhill.

To complicate things just a little more, one of the problems is that often the occupants of a building cannot, or will not, pay attention to the systems to see whether they are ready to perform. That is our job. The only recourse the occupants have is to blame the fire service if it doesn't work. Many building owners view maintenance as an overhead cost that they would just as soon dismiss as irrelevant. Tell that to the firefighter who is facing a fire without the tools to do the job. Maintenance is just as important to the firefighter as safety belts are on the way to the call.

So, don't wait until it's broke to fix it — make sure it's working all the time. ■