



CHIEF'S FILE CABINET

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Crying Wolf

There once was a Shepherd boy who was very lonely. He decided that the way to obtain companionship was to shout out “wolf” whenever he felt that he needed to have someone come and be his companion. He did it so often that after a while when he cried wolf, nobody showed up. You guessed it. After he had burned all of his bridges with those who were asked to come to help him, the wolf really did show up.

This fairytale came back into my mind after reading in a recent newspaper article about a fire department controversy. The article stated that the firefighters in a specific community were very upset about the fact that the chief of that department had decided that he was no longer going to send full first alarm assignment code 3 to alarms and certain types of commercial and industrial occupancies. The reason he gave that was that 99.9% of them were false. The firefighters regarded the decision to not send in code 3 to these types of alarms as a threat against their personal safety. Their perspective was that it would be conceivable that one of those alarms could be real and they didn't want to be behind the classic “time-temperature curve”.

Who is the real loser in all of this? Is it the fire department because they are not going to respond to code 3? Is it the property owner because they are not going to receive a timely and effective response when a real event occurs? Is it the chief because he is going to face criticism from his firefighters?

Behind all of this is a very simple fact. The real reason that the chief felt forced to do something about the phenomenon was an increase in alarms that were unjustified to the occupancy. Now that is a real problem. It is a modern day version of crying wolf. As the authority having jurisdiction we need to go back and examine this phenomena very carefully because it is literally a contradiction for our professional goals.

To be more specific, let's talk about the real reason why we put sprinklers and fire alarms into buildings in the first place. The stated purpose of such a decision is to improve the survivability of that building in the event that an event occurs. In other words, fire alarms are installed to get people out, i.e. evacuation. Alarms are designed to cut down on the total reflex time between ignition and response by the fire department. Fire sprinkler systems were installed in buildings to confine fire to its area of origin until an effective firefighting force can arrive on the scene and assure that the fire is completely out.

Therefore, not unlike our little shepherder who is worried about his sheep, all of the wolves that can come into play need to be kept away from the flock. But crying wolf diminishes the effectiveness of each and every one of these technologies. In the event that so many alarms occur at a specific location that it begins to wear thin on the patience of the fire department then it is possible that the building



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owner will lose the advantage of all of these installations. That is not only ineffective, it is also counterintuitive.

One remedy I have heard proposed to resolve this problem is to merely fine people when they have an excessive amount of events that force the fire department to respond. That is a financial version of being whacked on the hand for doing something wrong. Yet it has no bearing on the really true cost of continued false alarms in a structure. I can't tell you how many times in my career I have read articles about firefighters who were killed responding code 3 to what later turned out to be a false alarm.

Crying wolf has a price tag and it's up to the fire profession to make sure that that price tag is as low as possible. But on the other hand it is up to commerce and industry to play their part in keeping that cost to an absolute minimum also.

Let's talk first off about how we know we have a problem. I know I have asked this question many times as a chief officer and gotten some very interesting responses from members of my own staff. The question is pretty simple. What is the difference between a truly false alarm and an accidental or malfunctioning alarm? If you came up with the answer of intent you are pretty much on the right track.

A truly false alarm is when someone thinks they have a problem, activates the system and causes us to respond. What makes it false is not the fact that the person took the action but rather that the justification did not merit the response. On the other hand accidental alarms, i.e. a forklift breaking off a sprinkler head or the activation of a smoke detector because a cleaning person uses a vacuum cleaner to blow air into the smoke detector, are not false alarms at all. They are accidental alarms. And, in the event that a system is not properly designed, engineered and maintained and it goes off for a variety of other reasons in which there is no human factor then we have a malfunctioning alarm. Each of these is a separate problem in terms of its elimination.

But, first off we need to know we have a problem. I would like to suggest that most fire departments when they look at their annual fire statistical data focus mostly on those kinds of events that are classified as fires and emergency medical service calls. These are bread and butter events for most of us. Yet, on an annual basis being called to events as a result of false, accidental or mechanical malfunctions can often be a relatively significant number. If you look at urban fire departments these numbers in some cases may be outrageous.

So, we need to define what we really mean by these terms and then secondarily we need to be evaluating them on an annual basis. A first look at this data would be simply to examine the total numbers and break them down into their respective responding units. What is more important however is to look at the second level of those reports and those incidents and to determine how many



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of them are reoccurring at the same address. Automatically this raises the question of how many alarms are too many alarms.

Well, I am not prepared to give you a number. What I am prepared to suggest is that you start trying to determine the reason why “frequent flyer” alarms occur anywhere in a system in which built in fire technology was required. I bet you there are hundreds of buildings within your community that have none of this technology installed and you have very few false alarms, accidental alarms, or malfunctioning alarms occurring there. One of the best ways to characterize this data is to use geographic information systems. In other articles I have proposed that displaying incident data on a map is much more informative than merely looking at tabular reports. If you have a density of a large number of alarms that are not a direct result of actual events it is time for you to institute a strategy to start reducing those.

You note that I didn't say reduce the response to them. What is absolutely essential is that you start developing a response to the elimination of unnecessary calls for service. To retard our response is not in our best interest. Improving the quality of alarms is. Causation is very important. I can give you a couple of anecdotal examples that will provide you with some insight. When I was a battalion chief in Costa Mesa California we had a sprinkler system installed in a fiberglass boat factory that seemingly had an excessive amount of water flow alarms. That particular system had been installed because of a very high-risk occupancy and yet after about the 30th or 40th call to the scene in one year the firefighters in the first in engine were ready to lose their cool. For a variety of reasons these calls were scattered out across three respective shifts and it took about nine months to identify that we really had the problem.

When we started analyzing the data there were three things that started coming into focus rather quickly. The first of these is that almost all of the alarms were occurring at the same time of the night.

The second factor was that there was absolutely no rhyme or reason as to the day of the week in which the event occurred. There was almost an equal distribution across all five days of the regular workweek. The third commonality was that almost every time the crews responded to the scene they be told that the alarm bell had been ringing and it had just discontinued ringing just arrival to the fire company.

This particular occupancy was a very large building. There were three separate risers in the building and in looking at the data the indication was that the experience was occurring on all three risers in a random fashion.

Finally, we went out to the business one night and engaged in a discussion with the maintenance crew and had them walk us through everything that they did during the evening. This particular system had been designed with an inspector's test valve on the far side of the building that was completely out of view of the water gong. In the course of the evening we were advised by one of the individuals that at



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the end of his shift mopping offices he always took his bucket outside and dumped it into a drain behind the building. Then he advised us that he used a garden hose to rinse out the bucket. Three guesses what the garden hose was attached to! You are right. The garden hose had been connected to the hose bib that was connected with the inspectors test valve. There was was once a a sign there, but it had been removed

Problem solved. A sign was placed on the inspectors test valve and we never again experienced a water surge under the same set of circumstances. Now you may think that is sort of an intuitive solution, yet it took us approximately nine months to figure that all out because of a variety of circumstances. What is amazing to me in retrospect is that we never noticed that it never occurred on a Saturday or Sunday evening nor did we ever notice that there was always a maintenance crew there when we arrived on scene. A lot of that had to do with who was on duty, what captain filled out the alarm report, etc. etc.

The issue here about eliminating false alarms is pretty simple. We need to make sure that building fire protection technology does not result in the crying wolf syndrome because that diminishes its effectiveness for both the property owner and the emergency responder. Although this was a different story to tell, interestingly enough a couple of months after we resolved the problem in that sprinklered occupancy we did have a real fire in a fiberglass boat factory. In that scenario sixteen heads were fused as a direct result of a Methyl Ethyl Ketone barrel igniting and resulting in a activation by the sprinklers that probably saved millions of dollars of property loss.

What I am suggesting here is that we need to pay very close attention to what is causing our firefighters to be sent code 3 to a non-event. None of our firefighters resent meaningless responses. Many of our firefighters are like the Shepherd boy's neighbors in that they really get tired of hearing the cry for assistance that is irrelevant. The administration of a fire department should be focusing on the elimination of malfunctioning and accidental alarms to a very large degree. We talk about an ounce of prevention being worth a pound of cure. This is especially true in making sure that built in fire technology works when it is supposed to work and doesn't create a burden when it is not working.

If there are reoccurring events at specific locations, they should be identified, analyzed and eliminated as quickly as possible. As stated earlier issuing fines does not result in a reduction of overall liability to the department. Eliminating the events does.

One person's interest that was not reflected in the Shepherd boy's story was who owned the sheep. The Shepherd may have lost his credibility but it was the sheep owner who was going to lose the sheep if the wolf really showed up.