



CHIEF'S FILE CABINET

Ronny J. Coleman

Where Are Your Ucalegon's?

There was once a beer commercial that used to talk about a mysterious group of little people called the Artesian's. The name was a takeoff on the beer company's use of Artesian wells that supposedly consisted of the purest of well waters. As I recall the commercial, the location was in Tumwater Washington and the commercial always talked about the fact that no one ever saw the Artesians but that their work was embedded in the quality of their brew.

I have a little surprise for you. You have a group of people in your town that are like those Artesian's. You may not even know where they are, but they are there none the less. They are called "Ucalegon's". In the past you have met many of them but didn't know what they were called. You merely called them "fire victims". You might wonder, what is the difference?

The answer is found in the depths of etymology. Etymology is the study of the origins of words. Ucalegon was one of the elders of Troy, whose house was set on fire by the Achaeans when they sacked the city. If you have read the Iliad or the classic Aeneid, you will find references to his name. He was a very close friend to Priam who was the King of Troy. For many years, the word Ucalegon was noun that meant a neighbor whose house is on fire or has burned down. Apparently, it was possible to be a fire victim over 2,000 years ago, and receive sympathy from others. So it would appear that nothing has really changed.

Or has it? The prospect of a person's home burning to the ground today is far less than it ever has been in the history of the human race. While structure fires still occur, they tend to be further between than they used to be, and the average ignition does not always result in the total destruction of a building. There are many reasons for this phenomenon. Among these is the advance of modern building technology, the widespread adoption of smoke detection and residential sprinklers. Lastly, there is the role of public education and information that has resulted in the average person being more aware of the possibility of fire than ever before.

We cannot rest on our laurels. For the Ucalegons are still among us. I was reminded of this over the last two weeks while viewing television news shows regarding the loss of homes to urban wildland interface fires and by reading newspaper accounts of multiple alarm fires resulting in the deaths of entire families in older non-conforming multifamily residences. Today, the person who is likely to suffer a major fire loss is an interesting study in contradiction. The individuals who lost their home to interface fire are more likely to be very wealthy and/or at least above average in income and personal wealth. The person who is most likely to die in an apartment house fire is the opposite end of the spectrum. They are more likely to be lower income and exist in living conditions that are highly undesirable.



CHIEF'S FILE CABINET

Ronny J. Coleman

In reality, the middle class in America is probably the safest from fire as anyone. That doesn't mean they don't experience fires, but the middle class, as defined by economic factors, is sort of like the center of a bell curve of protection. A significant number of the middle class lives in newer housing stock and is a beneficiary of the last thirty years of technological development.

I pose the question; where are your Ucalegon's? This is to provoke your consideration of how you are approaching the process of both code enforcement and public education and information. If you are a fire chief or fire marshal, your personal perspective on that question is a lot more important than it might seem. The fire and building codes that we have today are on an order of magnitude more sophisticated than they were thirty years ago. I can recall when the fire code was about the size of a small textbook. I remember when the building code was of a similar size. Today, both of these documents have expanded to be about the size of a notebook. These documents accompanied by appendices and other supporting documents, create a library of solutions to make the new occupancy the safest that it can be.

So, I am not talking about code enforcement per se. What I am in reference to is how we use those codes to improve the overall nature of our community fire problem. What I am talking about is dealing with the non-compliant aspects of our community and targeting specific audiences to reduce the possibility of fire loss.

How much time do you spend in reviewing the NFIRS data for your jurisdiction? Most everybody today is experiencing a shift in demand upon their services that is primarily based on emergency medical services. As I look at different departments I see a response rate ranging from 70 to as high as 90 percent of the calls being devoted to this type of service demand. Fires can easily be lost in the midst of that kind of statistical static. The question I am posing to you is whether or not you are actually looking at your community's fire record, regardless of whether that number is small or large. The emphasis here is on the process of examining fires to see if there are trends and patterns that are likely to be repeated in the following year. To give you another visual image, you might recall the admonition that lightning never strikes in the same place twice. But, it often strikes in the same vicinity. One of the reasons that might occur is that there could be some specific factor that is attracting the discharge of electricity from the clouds to the ground. A tall tree or some other attraction might result in lightning strikes tattooing the area.

The same thing might be said about structure fires. It is true that fire seldom strikes the same place twice. When it does occur, this is usually a ground for suspicion.

The operations division often intuitively knows what neighborhoods is the most fire prone. Sometimes the fire prevention bureaus are not heeding the warnings coming from this information.



CHIEF'S FILE CABINET

Ronny J. Coleman

Going back to the beginning of this article I mentioned that there are demographic factors that tend to repeat themselves in the fire world. People who live in urban wildland interface areas whether they are rich or poor, are likely to be victims of wildland fire. People who live in poverty or near poverty conditions are much more likely to have a fire and are more likely to suffer loss than any other economic subgroup.

My interest in this topic came from working with a fire department that was paying attention to these factors. At the end of one of their calendar years, a review process was conducted on structural fires and it was determined that a significant number had occurred. Moreover, the structural fires all tended to be kitchen fires and the neighborhood had a specific cultural background. This department took action based on that information and targeted the neighborhood with a “blitz attack” that resulted in the following years statistics being drastically reduced.

As I read fire protection publications, I am often dismayed at the pride that we seem to take about being “the busiest companies”. The reason I am dismayed is that actually understand the phenomenon but I don’t understand the rationale. By understanding the phenomenon, I will admit that when I was an active firefighter I loved going on working calls like everyone else. When is morale the highest in a firehouse? When there is a lot of action. However, we exist to save lives and property, not to offer it up as a sacrifice to our morale. That is illogical.

Merely looking at the raw numbers of our response workload is not managing the problem. Fire marshals should be focused on why things are occurring.

That level of analysis should be the function of all fire prevention bureaus. We should be the leading experts on where our structural fire incidents are disturbed and/or concentrated in the community. In the GIS world, that term is called “hot spotting”. Hot spotting is nothing more than linking incidents up to other incidents within a certain distance radius and forming some conclusions about the characteristics of that area that may be causing the problems.

Part of the management strategy of a fire prevention bureau should be looking at all structural fires on an annual basis. The more uniform the distribution of structural fires, the more likely that there is a degree of randomness of the events. But, if the experience demonstrates that some demand zones have more fires than others, it is time to drill down.

It is interesting to me that many operations divisions have already accomplished this when viewing EMS calls. For example, the location of residential care facilities for the elderly, often results in a tremendous amount of concentration of EMS calls. Depending upon the nature of the working relationship with that business and with the ambulance authority that may or may not be a problem. Some departments have



CHIEF'S FILE CABINET

Ronny J. Coleman

coined the term “frequent flyers”. This is a pejorative term for locations where demand is on the verge of being unreasonable.

Trend analysis is a very important part of risk mitigation. Because we are paying so much attention to the EMS problem, we may be missing the point with our fire problem. If there is a particular area in which a particular type of call occurs over and over again it should be a targeted area. It should be the target for such things as public education programs, targeted enforcement programs and maybe even surveillance and one on one contact.

When you look at fire problems this kind of trend analysis may be a part of the overall strategy to introduce mitigation practices. If there is a particular area in which a particular type of call occurs over and over again that should become the loci of future consideration for mitigation strategy. That would include but not necessarily be limited to such things as public education programs, targeted enforcement programs even surveillance and interviewing processes.

Over time this lightening strike phenomenon strike can be either reduced or at least more thoroughly understood. If it cannot be reduced there is a possibility that the operations division in the fire department needs to be considering additional resources. This begins to play into such things as unit utilization and the need to have secondary equipment. Or, it can be reduced if they require the department enact memorandums of agreement for other entities to reduce reliance on the emergency services division for events that are essentially non emergency.

In essence what we are saying is that if you have got lightening strikes that start to concentrate you ought to be putting up a lightening rod.

This metaphor applies to the fact that you are unlikely to be able to prevent lightening from being discharged but you certainly can minimize its impact on the ground. Workload analysis that is based upon frequency, distribution and concentration of levels of activity is a logical extension of understanding the risk assessment in a community. This particular technique does not necessarily mean that you give up the more structured approach to inspecting occupancies in accordance with other policies and procedures. In other columns we have talked about the fact that there is a function of graceful degradation that sits in place of almost all occupancies that once you inspect the building the minute you walk out the door it begins to deteriorate.

I would carry that so far as to say that once you have compliance that graceful degradation begins to occur shortly after that also. The reason for using this particular technique in conjunction with linear planning for code enforcement is the very idea that you may have some parts of your town in which conditions have not been brought into compliance and they need to be targeted and reduced to an absolute minimum if you wish to keep the remainder of your workload totally under control.