# Fire analysis and investigation research paper

Law, Security



### Introduction

Fire investigations have been part of our society for a long time. This is because fire investigations give individuals answers concerning the causes of the fire and provides them with information on how to prevent such fires from happening in the future. For example, if the causes of the fire were accidental, then fire investigations can identify the likely causes and help eliminate them from the market to prevent fires from happening in the future. If a fire was started maliciously, then the investigations can help catch the perpetrators. It is also essential to note that fire investigations are of essence to public education. This is because they educate members of the society on how to identify hazardous tools and situations and help prevent fires from taking place. Fires can be extremely costly, and as it follows, they can cost the economy terribly. Investigations are, thereby, necessary to curb these costs (NFPA, 2001).

Various court orders have been established to govern and regulate fire investigations. Such court rulings and decisions have affected significantly the effectiveness and the rate of professionalism and success in analysing and investigating fires. Each state has different laws that regulate the processes of fire analysis and investigation. As a result, investigators must be familiar and conversant with each one of these laws. Immunity laws are also available that protect and regulate the type of information insurance companies access regarding the fires. Other laws regarding the same information are available to regulate individual legal rights regarding such fire investigations (NFPA, 2001).

The purpose of this paper, therefore, is to analyse and explore some of the court decisions and laws regarding incendiary analysis and investigations of fire. In addition to this, the paper is also going to look at some of the effects of these laws and decisions on accessibility and collection of evidence from the fire scenes.

# **Significance of Fire Investigation and Analysis**

Acts of negligence, criminal acts, or negligence coupled with a number of other mechanical, related factors are some of the causes of fire that lead to the aspect of the need to analyse and investigate fires. The society has the need, sometimes personal, others legal, to determine the causes of fires affecting the community. There are various reasons why it is essential to find the causes of fire other then to ascertain that it was as a result of arson.

Some of these causes include; the information and data collected from a fire investigation and analysis can be detrimental in preventing such fires from happening in the future. Such data is often used during risk reduction training programs. Finding out fire causes can also help correct defects in manufacturing that can lead to fire; can also help in building and fire codes improvement; can also help in suppressing arson; and in increasing the safety of the fire-fighters (NII, 2000).

### **Law and Court Decisions**

Many fire investigation experts recommend that a fire analysis and investigation must be detailed and thorough; this includes thoroughly investigating the evidence and the scene of the fire. The main purpose for this is to protect the rights of a suspect and to make sure that the evidence

will be reliable, as well as, credible in court. It has been noted that criminal and administrative laws overlap when it comes to arson cases because of the nature of the analysis. Individual rights additionally vary according to the investigator; whether it was a private investigator or an official from the government. Such laws resulted from case laws respecting investigations such as fire and health investigation. These laws relate to the laws concerned with seizure, process, and search. As it follows, these laws guide and define how investigations and analysis must be carried out (Ogle, 2000).

Collecting evidence from a scene of fire is affected by numerous factors. For example, the laws requires fire investigators to first ensure the safety of the people or victims involved in a fire before commencing with analysis and investigative activities. This is because safety is regarded as the most important activity in such cases. Since fire investigations come second to saving lives of the victims, it is possible that such activities can greatly compromise the type of evidence an investigator collects from the scene of fire. In other cases, the criminal process might also hinder with the activity of collecting evidence from the scene. This is because the law requires the fire investigators to notice self incrimination during the investigation activities. In addition to this, the law also expects the suspect or the individual who has been accused to be freed from any offered counsel irrespective from the source. Because of such laws and rights to the accused, the fire investigator at times might find it difficult to access a scene as quickly as it is required because by doing so, he might be violating with the rights of the accused individual (Ogle, 2000).

Court decisions have also largely affected the process of fire investigation and analysis. This is because the expert investigating the cause and origin of the fire must bear the whole responsibility of proving that the techniques and methodologies used in the fire investigation were the appropriate ones in the context of that particular case. As a result, a fire investigator must demonstrate that the results and evidence he presents to the court is reliable and credible in terms of the conclusions drawn and the methodologies applied in the case. In addition to this, certain court decisions have made it clear that investigators must be ready to not only why a particular analysis methodology was favoured, but also why that methodology is the most credible and reliable one to draw answers and conclusions about the fire that can be presented in a court. According to such court decisions, for a method to be said to be credible and reliable, it must have been scientifically proven to be reliable and valid. Because of such legal requirements, the pendulum has changed hands from fire technicians to those of fire scientists, which fire investigators, must be ready to face and deal with the issues this brings (Burnette, n. d).

# **Effects of Controlling Fire Scenes**

The above mentioned laws and court decisions have numerous effects regarding the accessibility of fire scene to the investigators, and collection of evidence. For example, the laws concerning the rights of an accused person affect greatly, the accessibility of a fire scene. For example, a fire case might be a civil or a criminal one. In case the fire involves a criminal case, then it draws the attention of numerous interested parties of investigators.

Investigators affiliated to the forensic department might be present, as well

as those affiliated to the attorney general and other law enforcement departments. As a result of many investigators to the scene, the fire scene might be too crowd for the investigators to access. In addition to this, the relevance and validity of the investigators might also affect negatively the accessibility to the scene of such a case (Ogle, 2000).

In addition to impeding the accessibility to fire scene, laws and court decision scan also affect the nature of evidence collected from a scene that can be considered relevant or valid in a court. The process of fire investigation has changed greatly for the past few years, all because of the various restrictions and regulations exerted by law and other public policies. The interaction with the scene of fire by numerous investigators, as mentioned above, can play a key role in compromising the kind of evidence collected from such a scene. In addition to this, the kind of evidence collected can also be affected by the methods and processes of collecting evidence that have been introduced by the law. Currently, there is a need to analyse all of the aspects that might be considered to be the causes of fire. Factors such as fire patterns, shoe prints, impressions left by a car, broken windows, and distribution of flammable materials in a certain manner are some of the critical factors that fire investigators must now collect. A fire might be an accident, but such factors might falsely indicate arson. In such cases, incarceration might result wrongfully because of the manner in which evidence was collected (Lentini, 2001).

## **Conclusion**

The purpose of this paper was to analyse and explore some of the court decisions and laws regarding incendiary analysis and investigations of fire. It was found that fire investigations are essential in helping individuals find out the real causes of fire. Fire investigations also provide individuals with data that can be used to prevent the occurrence of fires in the future. Fire investigations have been greatly affected by various laws and court decisions. Evidence collection and accessibility to the scene are some of the major factors in fire investigation process that have been negatively affected.

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