



## Engineering Sciences Section – 2003

### C13 Arson or Accidental Flashback?— Sorting Fact From Fiction

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The goal of this presentation is to provide some insight into the objective evaluation of expert witness opinion and testimony that may initially appear realistic, but which may in fact be flawed and inappropriate.

There is an increasing reliance on experts in the assessment, reporting, and resolution of insurance loss episodes, and of claims and counterclaims arising from such loss episodes. Regardless of how the resolution of such a matter is attained by various parties, be it settlement, mediation, arbitration, or trial in a court of law, dependence on expert opinion will frequently be a key factor in determining the outcome.

The fact that different experts may express differing opinions on the same matter will present a dilemma to those who would rely on expert opinion to guide the resolution of a matter under dispute to a true and just decision. Added to this delicate balance is the fact that some experts may – either by accident or by design – present an opinion which is intended to serve the interest of their client before serving the interest of truth and justice. When such an opinion is packaged in the shroud of scientific and engineering jargon, it may appear to be quite convincing even though it is not completely accurate.

A truly objective forensic expert will periodically be faced with the challenge of identifying, explaining and hence, unmasking the flaws of an opposing opinion, an opinion that is in reality partisan to the case of one party over another.

This presentation will review the salient details of an actual case history that was resolved at trial. The matter before the court dealt with a fire loss that resulted in an insurer denying a claim on the basis that the insured had committed arson. The insured claimed that the fire was caused accidentally, and denied that arson was committed and sued the insurer for breach of contract.

Furthermore, as is often the case in such matters, the insured had been previously charged with the criminal offence of arson, but was acquitted at trial because he was given the benefit of reasonable doubt. At the criminal trial, no expert or expert opinion was introduced to the court on behalf of the accused.

In preparation for the subsequent civil trial, which followed the acquittal of the insured on criminal charges of arson, counsel for the insured now retained the services of an expert. The expert put forward the notion of accidental flashback as an explanation for the cause of the subject fire, thereby negating the allegation of arson by the insured.

In a civil trial, while the plaintiff must prove their case, the final decision will be made on the balance of probabilities, as compared with a criminal trial, where there is a presumption of innocence, and hence the accused must be given the benefit of doubt. If the plaintiff's expert in a civil trial that will materially alter the balance of probabilities can introduce a scientific opinion, this may be sufficient for the plaintiff's case to effectively succeed at trial. This is a delicate process that could work if it effectively strengthens the plaintiff's case by simply weakening the defendant's case. Note that in so doing, no overwhelming factual evidence need be introduced by the plaintiff's expert. That is, the plaintiff's case was not strengthened by the introduction of important evidence, but rather by simply diluting the strength of the defendant's case, instead.

As will be demonstrated in this presentation, the careful and objective forensic engineering assessment of every detail associated with the plaintiff expert opinion and hypothesis concerning flashback resulted in identifying a subtle but important flaw. Once exposed, and removed from the hypothesis, the flaw rendered the hypothesis of flashback as being not merely improbable, but clearly impossible.

Finally, it was absolutely necessary that the identified flaw be checked and crosschecked to assure its validity. This presentation will explain how, through the use of parallel forensic experts, the flaw was checked, tested and confirmed absolutely. When the flawed hypothesis was exposed in a clear, concise, and objective manner at trial, the plaintiff's case was totally destroyed and his claim was dismissed.

#### **Arson, Expert, Flashback**