

### **Forensic Fire Investigation**

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### **Fire Investigation Methodology**

### The Scientific Method





### **The Scientific method**

- Aristotle (384-322 BC)
- Empirical method of acquiring knowledge
- NFPA 921 Guide for Fire and Explosion Investigations
  - A systematic approach.



### NFPA 921 2017





### **Decision Logs** Fire Investigation Road Maps (FIRMs)



### Fire Investigation Road Maps (FIRMs)

- Developed by Dr Peter Mansi (Partner FI-UK LLP)
  - PhD into Fire Investigation Methodology
- "Because of the difficulty and complexity of a complete and accurate fire investigation, and the potential of mental preoccupations, there is a special need for every investigator to develop a comprehensive analytical approach to the task." DeHaan Kirk's Fire Investigation



### Myths & Legends Media Influence on the understanding of fire



### I was smoking when I brushed past my wife who had spilt a flammable liquid on herself









# Defence – I just wanted to scare them, I did not expect this to happen









### **Osbourne Road Huddersfield**







### **Philpott Fire Derby**







### I dropped a cigarette whilst asleep and woke up to find the bed on fire





### **Prosecution– More than one seat of fire must be arson**

















## National Institute of Standards and Technology Technology Administration U.S. Department of Commerce



### Questions

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