

Texas State Fire Marshal Spring Training Seminar

CANINE USE - AN INVESTIGATORS PERSPECTIVE

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SENIOR FIRE ANALYST

QUEST FIRE ANALYSIS

NFPA 921 – 2011, Ch 16

Physical Evidence

- ① 16.2.2 The decision on what physical evidence to collect – rests with the investigator
- ① 16.3.2 Fire Patterns – the visible or measurable physical effects that remain after a fire (thermal effects ie. charring, oxidation, loss of mass, smoke & soot, distortion, melting, structural collapse)

NFPA 921 – 2011, Ch 16

- Artifact Evidence – remains of first materials ignited, ignition sources, other items or components that relate in some way to ignition, fire development or spread. Artifacts can also be an item on which fire patterns are present

Canine/Handler Teams

- NFPA 921 – 2011, 16.5.4.1 Liquid Accelerant Characteristics
 - Readily absorbed by most structural components, interior finishes and other fire debris
 - Generally float when in contact with water
 - Have remarkable persistence when trapped within porous materials

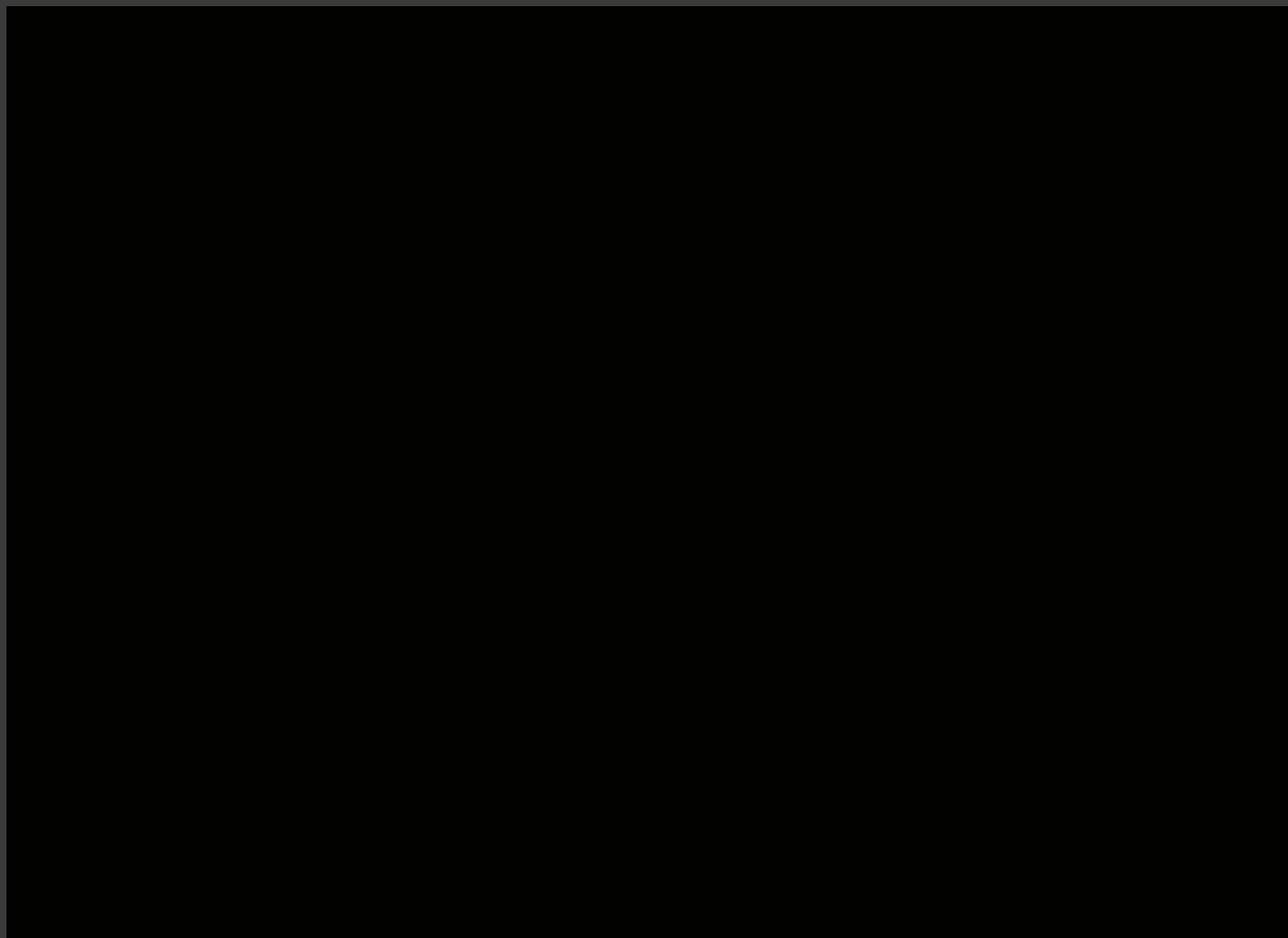
Canine/Handler Teams

- NFPA 921 – 2011, 16.5.4.7

Canine Teams

- have proven their ability to improve fire investigations by assisting in the location and collection of samples for laboratory analysis
- The proper objective of the use of canine/handler teams is to assist with the selection of samples that have a higher probability of laboratory confirmation than samples selected without the canine's assistance.

Canine/Handler Teams



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Canine/Handler Teams

- ◎ SFMO unpublished study
 - Investigators w/o k-9 assist – 30 to 50% ratio on confirmed samples
 - Investigators w/k-9 assist – 80% or better ratio of confirmed samples

Canine/Handler Teams

- ◎ Inspection of Fire Origin for First Materials Ignited
 - How/what criteria does the CFI use?
 - Artifacts?
 - Fire Patterns?
 - Burn Patterns on Furnishings?
 - Irregular Fire Patterns?

Canine/Handler Teams

- ① When/Why does an Investigator Call for a canine team?
 - Confirmation of what is suspected?
 - Potential Confirmation or Expectation Bias

Canine/Handler Team

- Arson Canine - Improper use of the term