

BEHIND THE SCENES OF A FIRE INVESTIGATION

What happens behind the yellow tape? A reporter is allowed in on a suspected arson fire investigation and here's what was learned.

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August 27, 1998

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Purposely setting fire to property, costs taxpayers more than fire extinguishing, Deputy State Fire Marshal Dave Fields says. The investigation can take as many as 100 hours, involving numerous officials from different agencies. Arson does not pay, Fields made clear.

The following feature story portrays the procedures followed in a fire investigation.

The emergency 9-1-1 call came in shortly before dawn. The neighbors reported that a house was ablaze.



Arson fires cost taxpayers thousand of dollars each year. Investigators can spend as much as 100 hours on each case.

Prineville Fire Department crews responded to the call and, after determining no one was inside, quickly extinguished the flames.

Before the ashes could cool, Deputy State Fire Marshal Dave Fields and his crew were on the scene – ready to investigate the cause of the house fire. Although the 50-year-old house still stood, the front portion was charred and the rest of the house was badly damaged and ready to collapse.

Fields had a sneaking suspicion that the cause of the fire was not accidental. He called on Detective Mark Merrill with the Oregon State Police Arson/Explosives Section. Merrill traveled from Portland with his K9 officer, “Deacon”, a professional accelerant finder.

The 7-year-old black lab is one of three Accelerant K9's in the state. All are from the Guide Dog Foundation and valued at \$30,000.

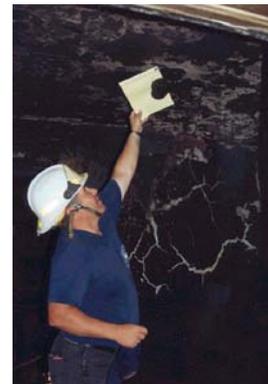
Deacon has a fire-year contract with the Bureau of Alcohol, Tobacco and Firearms. He investigates suspicious fires where accelerants may have been used to start fires.

He can locate approximately 20 oil distillates, Merrill said, including gas, diesel and Coleman fuel.

“It’s a fairly easy exercise,” Merrill said, adding that the procedure takes only 5 – 10 minutes.

Merrill leads Deacon through the ashes and when the dog smells an accelerant, he puts his nose to the ground. Merrill then knows a sample should be taken from that exact area.

Dogs are able to find fuel much faster than humans because of their extra-sensitive sense of smell. A drop of gas to the dog is similar to what it would be for a human to stick their head in a pot of gas, Merrill said.



State Fire Marshal Dave Fields shows the light bulbs that enlarged toward the point of the fire's origin



Deacon, a 7-year-old black lab, takes a break after inspecting house remains for accelerants

Each time Deacon picks up a scent of accelerant, he's rewarded with dog food. Every meal is a training session, too. Deacon is trained to find accelerants and must work for food. "He never eats out of a dish," Merrill said. But it takes 30 minutes to an hour for each feeding, because accelerants must be dispersed and then found by Deacon.

Fire investigators often decide to use Deacon, who inspects about 50 fires a year, Merrill estimated.

In his search of the local house, Deacon discovered gas was from a weed-eater. This, Fields said, was not the cause of the fire.

After searching the remains of the house, investigators came to the conclusion that accelerants did not cause the fire.

The next step, then, was to further investigate the electrical hardware.

Fields said looking for fire patterns helps determine the point of origin. Light bulbs, he said as he pointed to a ceiling fixture, give clues. Light bulbs enlarge toward the point of the fire's origin.

A "V" forms at the bottom of the burning structure, also providing valuable clues as to the fire's origin. Fire investigators take note of clocks – the time of the fire is often pinpointed on the clock.

Investigators also inspect electrical appliances that remain plugged into outlets.

Meanwhile, the House Insurance Fire Investigator visits the site, taking note of the damage and conferring with state fire investigators as to their opinion of the cause.



Detective Mark Merrill from the Oregon State Police Arson/Explosives Section.

The fire marshal lets the insurance person in on some of the family details – they're behind on payments, just moved out, recently filed for divorce, etc.

Back at the office, investigators pour over photos of the structure before, during and after the fire.

All these clues are pieced together until something can be proven.

If the cause is accidental, insurance claims are readied.

If caused by arson, another bundle of taxpayer money is chalked up for criminal prosecution.



A fire investigator for an insurance agency takes note of the damage. If found to be arson-caused, the insurance will not pay the owner