



The International Association of Arson Investigators is pleased to announce New Training Opportunities for the 2020 Year. We have partnered with some of the leading subject matter experts in the field of electrical fires and fire dynamics to present one-day and two-day trainings. These trainings will be all inclusive for one cost: Training, educational materials, testing, breakfast, lunch, afternoon break and beverages all day.

The first class in this series will be presented on March 3, 2020 in Carmel, Indiana. The location is the Drury Inn and Suites approximately 20 miles north of Indianapolis. Close proximity to the Indianapolis airport and easy driving distance from surrounding states.

Seating is limited in these offerings to 125 participants, so sign up early. The first presentation will be “Electrical Fire Causations”, presented by Jack Sanderson. Mr. Sanderson, former owner of Fire Findings, LLC and educator. Mr. Sanderson will present eight hours of extensive training in electrical fire causations through lecture and video demonstrations of fire events, case studies and laboratory testing.

[Register Here](#)

IAAI Regional Electrical Fire Causations “Presented by Jack Sanderson”

Electrical fire causation in your everyday fire investigations. This course will primarily involve electrical conductors (power and extension cords, to a lesser extent branch circuit wiring), connections and electrical outlets. Although the principles are largely the same, the course doesn’t directly cover electrical malfunctions that lead to fires WITHIN appliances, but rather in the systems and services which transmit power to those appliances and other devices.

It will discuss the primary methods by which electrical energy causes fires. What evidence to look for and what it means. Just as importantly what that evidence doesn’t mean. Also how do you know if you’ve found the likely electrical cause of a fire. You can argue that electrical fire is primarily caused by three factors: too much current, too much resistance in the wrong place, too much (and sometimes too little) voltage. But it’s important to realize the vast majority of electrically caused fires (outside of appliances) can’t be determined simply by looking at the physical evidence. Location, location, location or maybe we should say origin, origin, origin coupled with physical evidence is the key.

Presentation Topics and Video Demonstrations:

•Overcurrent as a fire cause.

What is overcurrent? Why is it the easiest way to start an electrical fire, but maybe the least likely. Overcurrent occurs along the entire path of the circuit (overcurrent videos show it happening). Investigators often find fires around entertainment centers, for example, and blame “overloading” and extension cord for the fire but investigating the power draw of those devices may lead to the realization that the load itself was well within the capability of the cord but previous cord damage or something else altogether maybe be responsible. Learn how to evaluate such situations. What overcurrent damage looks like. Where to find it. What it means.

•Arcing - serial arcing vs parallel arcing - What the difference between parallel and series arcing.

Parallel arcing (between neutral and phase conductors) is what’s usually thought of as the “arcing” that starts fires. Videos of arcing in packing paper, wood, etc. then natural gas. Parallel arcing that is caused by fire damage to a conductor can certainly cause sustained arcing.

•High Resistance Connections

Explain resistance. Videos with ohm meters reacting to changing resistance.

Identify what connections are and where they occur.

Video examples of where high resistance connections can occur.