

## **Engineering Sciences - 2017**

## D17 Data Integrity in Forensic Engineering — Spoliation and Loss of Evidence

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After attending this presentation, attendees will be aware of the various practices used to further the legal success or outcome of one party at the expense of another.

This presentation will impact the forensic science community by exposing examples of the trickery practiced by unscrupulous parties in civil and criminal litigation involving willful or careless loss, destruction, or alteration of evidence.

Case 1: Loss of evidence — an electrician was electrocuted in his own workshop while testing a motor that he had rewound. He connected the motor to the test terminals and was immediately electrocuted at 480 volts. The two 50-ampere test clips he used had a protective insulating cover (boot) designed to provide insulation and protection from electrocution when handling. The attorney for the deceased claimed that the insulating boot was defective (i.e., had unspecified cuts or holes which permitted contact with the spring-loaded test clips. The plaintiff filed a product liability complaint against the manufacturer of the boot. The expert witness, upon being retained and asked to examine the boot, clips, and cable, was informed that this evidence was "lost" by the deceased's attorney. The only evidence available was autopsy photos of the deceased's hand. This was sufficient to generate a favorable outcome for the defense.

Case 2: Spoliation and failure to collect evidence — downed power line cases that involve electrocution or electrical injury require that utility companies that own the conductor that came down often do not collect the downed conductor or identify it properly. Most large utility companies have incident investigation procedures that call for such evidence to be retained. Often the conductor is discarded, "misplaced," or re-used by splicing (and thus non-identifiable). In many jurisdictions, the State Public Utilities Commission requires the utility companies to thoroughly investigate and record all incidents involving public contact cases. The utility investigators sometimes willfully take no or deficient notes or photos, even though their investigation procedures require these actions. Some conductors that were spliced and re-used, if they can be identified, must be removed to be examined inch by inch at the cost of the parties involved. Sometimes, such identification and removal cannot be conducted without an order from a judge.

Spoliation, Loss of Evidence, Electrocution

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