



Jurisprudence Section - 2014

E42 Crash Reconstruction Basics for the Legal Practitioner

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After attending this presentation, attendees will understand some basic concepts utilized in the field of crash reconstruction. The foundation of these concepts, along with some of the common myths and misuse, will be explored. Examples of each concept will be provided, along with a discussion of the importance of obtaining the underlying crash reconstruction file and what can be expected to be contained in the file.

This presentation will impact the forensic science community by familiarizing legal practitioners in both the criminal and civil realm with basic crash reconstruction principles, helping them to more effectively communicate with potential experts the attorneys may choose to hire, as well as spot problems with crash reconstructions completed in their cases.

After being appointed as counsel on two criminal vehicular homicide cases in which the crash reconstructions lacked any foundation for the opinions offered by the State's reconstructionist, the counsel embarked on an educational mission in crash reconstruction. Prior to this endeavor, the only vehicle-related education that could be claimed was one year as a FedEx driver in Green Bay, Wisconsin.

Concepts to be explored in this presentation include friction, often referred to as "drag factor," including methods used to determine a road's drag factor, the effect of drag factors on speed analysis and whether temperature can affect the friction value of a surface. Two common methodologies used to determine traveling speeds for vehicles involved in a collision will also be discussed: (1) conservation of linear momentum; and; (2) critical speed analysis. The foundations for each method will be explained and their potential for misuse will be examined. The question of whether headlights and taillights can be examined to determine if they were on at the time of an accident will be discussed, along with the limitations of this evidence. Included in this will be an explanation of why a complete vehicle inspection is vital to a thorough crash reconstruction. Finally, this study will provide an overview of what an attorney can expect to find in a crash reconstruction file and discuss the importance of obtaining the underlying file and meeting with the opposing expert prior to trial.

Actual case file examples will be presented of each concept to better illustrate the principles so even attorneys with no prior crash reconstruction experience will have a basic understanding of what to look for in future cases.

Crash Reconstruction, Basic Concepts, Attorneys