

## BOOK REVIEW

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### Review of: *Vehicular Accident Investigation and Reconstruction*

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**REFERENCE:** Van Kirk DJ. Vehicular accident investigation and reconstruction. CRC Press, Boca Raton, FL, 2001, 481 pp.

This is a new book on accident investigation and reconstruction consisting of 19 chapters with the following headings:

- 1) Why Investigate Accidents?
- 2) Where Do I Start?
- 3) Tools and Special Equipment for the Investigator
- 4) Scene Investigation
- 5) The Vehicle Exterior
- 6) Vehicle Interiors
- 7) Restraining Systems
- 8) Vehicle and Occupant Accident Investigation Forms
- 9) Occupant Kinematics
- 10) Accident Reconstruction
- 11) Severity Indices
- 12) Motorcycle Accidents
- 13) Pedestrian Accidents
- 14) Scale Drawings, Surrogates, Animations, and Computer Simulations in Preparing Exhibits
- 15) Mathematical Analysis
- 16) Sources of Information
- 17) Deposition and Courtroom Appearance

- 18) Educating the Client
- 19) Ethics

The focus of this book is accident investigation, not accident reconstruction, and is directed mainly at non-engineering type investigators. The author has written a detailed book that guides investigators through the steps and associated fieldwork necessary to collect data, and thus perform a reliable accident investigation. A detailed field accident investigation is often critical, and should be performed by knowledgeable investigators. However, an understanding of the underlying science is absolutely essential for performing and understanding all aspects of a scientific accident reconstruction. In this reviewer's opinion, it is a serious omission that the book does not consider the science of accident reconstruction in more detail, and that Newton's Laws of classical mechanics are not adequately discussed. Those of us who have performed detailed and complicated reconstructions are aware that accident reconstructionists who do not have the requisite engineering/science background can stray out of their knowledge base to reach conclusions that are not only seriously in error, but that also lead to miscarriages of justice. Although the coverage in accident reconstruction science is lacking, a hallmark of the book is the detailed attention it gives to conducting rigorous field investigations. As such, accident investigators may find the book useful and should consider adding it to their personal libraries.

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