

## BOOK REVIEW

W. Jerry Chisum,<sup>1</sup> B.S.

### Review of: *Practical Analysis and Reconstruction of Shooting Incidents*

---

**REFERENCE:** Hueske EE. Practical analysis and reconstruction of shooting incidents. Boca Raton, LA and New York City, NY: CRC, Taylor and Francis, Practical aspects of criminal and forensic investigations series, 2006, 322 pp.

“The goal of reconstructing a shooting is to establish a probable or likely sequence of events relating to the shooting, while recognizing other explanations are possible.” The premise that Mr. Hueske followed in writing this book is quoted from page 10. This is not a “firearms identification” book; instead, it deals with the use of firearms evidence in the reconstruction of a crime. It is invaluable to those who undertake to tell what happened at the scene of a shooting incident.

The book has many practical case examples used to illustrate the points he is making. Unlike many books, he doesn't only include cases where he was successful in determining exactly what happened. Reconstruction is equally as valuable in showing what didn't happen as shown by some of his case examples.

The author has included questions at the end of each chapter. Unfortunately, the answers are, in most cases, given before the next question. The reader doesn't get a chance to really think of the answer before reading it. In the next edition, these answers should be put in the back of the book or for teaching purposes, put in a separate teacher's manual.

The mathematics section (Chapter 2) simplifies the math and gives formulae for calculating angles of incidence, etc. While cautions are given that these are only approximations, the concepts of significant numbers and inherent errors are not discussed. As this book will be used by people having limited understanding of mathematics they will, as do the “blood spatter experts,” give undue accuracy to their calculations.

This problem is also encountered in the discussion of the equipment used at the scene (Chapter 4). He uses  $x$  and  $y$  coordinates for simplicity but some of the examples should have included the  $z$  co-

ordinate as well. The person who approaches these problems by rote either through lack of understanding or laziness will produce errors.

In the testing of gunshot residue (Chapter 8), 5% nitric acid is recommended in the described lift technique (p. 146). Acetic acid is safer as a solvent for Pb and is available in grocery stores as white vinegar. The use of potentially harmful reagents by non-chemists/scientists is not a practice that forensic scientists should recommend. This would include the sprays used to show lead, nitrites, etc.

The determination of bullet holes in windshield glass, Mr. Hueske says, is simple by determining the radial break that was stopped by another (p. 174). Unfortunately, he has not kept up with the available information on this phenomenon. The radial lines present from the first shot “grow” when the shock wave of the second shot reaches them. These lines will grow into and stop at the intersection with a radial line with the subsequent shots (see Rynearson, J., *Evidence and Crime Scene Reconstruction*, 6th Edition, p. 147, National Crime Investigation and Training, Redding, CA, 2002).

The Case Analysis (Chapter 13) is a must read. Not that he has told how to solve a case, but this illustrates quite well how one can go wrong in jumping to conclusions. He gives a number of cautions and destroys a number of myths that are given as axioms in shooting investigations. Anyone working any aspect of death investigations should at least read this chapter.

Mr. Hueske has suggestions for report writing and for making a reconstruction stand in court. He has filled a void not only in the firearms literature but in the investigative literature. Anyone attempting crime reconstruction will benefit from reading this book.

<sup>1</sup>CCI, California Department of Justice, Retired, Elk Grove, CA.