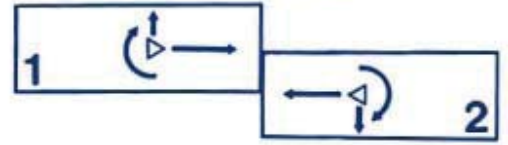


# ACCIDENT RECONSTRUCTION JOURNAL



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# **FUNDAMENTALS OF FORENSIC MAPPING:**

## **A review from the desk of Joseph E. Badger**

Mick Capman, founder of the Great Lakes Accident Reconstruction Society and better known as the Grandfather of Forensic Mapping, evidently was the driving force behind the latest book to come down the pike for accident (crash) reconstructionists. Kent Boots and Joel Salinas put their heads together to put together an exhausting 233-page essay titled *Fundamentals of Forensic Mapping*. (I can call Mick the Grandfather of Forensic Mapping since he and a colleague “first coined the term ‘Forensic Mapping System’ while driving to IPTM/Special Problems in 1992-93.” Says so, right on page six.)

Mick wrote the book’s “Forward.” And don’t look at me like that, I know it’s a Foreword, but Mick is bigger than I am and he can spell it anyway he wants.

The folks who published the book have a website, [www.kineticenergypress.com](http://www.kineticenergypress.com) where you can read about this book as well as others. If you purchase the book online, the cost is \$65 plus \$4 s&h & \$6 if you want it sent by Priority Mail.

Let me tell you about the first-of-its-kind book. It is both a “How-To” book and an encyclopedic reference work. According to the publisher’s website, “This new publication, the first comprehensive text published on the subject of Forensic Mapping, provides a refreshing overview of the topic and a detailed discussion of the ingredients that combine together for effective and successful mapping of complex scenes.”

It covers specifically “three main software manufacturers who have developed software specific to crash and crime scene investigation; The CAD Zone, MapScenes, and Visual Statement. Each of these companies has developed both diagramming software and data collection software. Versions of the various programs current at the time the book was written are the only ones being covered, not older versions.”

Probably the neatest thing about the book is not the printed text but the CD-ROM that comes with it that allows you to search the entire text. Although the CD-ROM has 17 different files (including an Adobe reader if you don’t have one on your computer), one of those files called *Fundamentals of Forensic Mapping.pdf* has the entire 233-page book in one handy place. You can copy and paste both text and pictures for inclusion in a report. Or use the document’s search feature to find that elusive section you wanted to reread (a feature I used more than once to write this review).

Although the 8½ x 11 book itself is easy to carry around (it has a soft cover), I think you will enjoy the CD-ROM version largely because the pictures are in fantastic color. (The publisher naturally chose black and white photos for the print version to keep the cost down.)

There are over 50 words and terms defined in the Glossary, in case you forgot what EDM

stands for or you want to know exactly what a Theodolite is.

Should you be just starting out to do forensic mapping of crash – and interior crime – scenes, *Fundamentals of Forensic Mapping* is a must-read; however, I suspect old-timers who have been around the transit and laser plummet a few times will have a few aha moments reading it too.

I asked the authors why did they want to write the book in the first place. They responded:

(Boots) “Many people in the accident reconstruction and crime scene investigation industry do not know what Forensic Mapping is. Too many times the term ‘surveying’ is used in conjunction with the use of a total station in crash and crime scene documentation. There are plenty of books on surveying but there was not a single book on Forensic Mapping. I felt it was time that a book be written on Forensic Mapping and was excited about the possibility it would be the first one. I teach Forensic Mapping on a somewhat regular basis. PowerPoint presentations are nice during a lecture but they don’t make good reference sources after a class. I wanted to be able to give my students a textbook they could use to reference during the class and more importantly after the class.”

(Salinas) “As a Forensic Mapping instructor I had a first-hand opportunity to see what students and officers were lacking and what problems they encountered in the field while mapping both crash and crime scenes. I don’t think that any instructional course could cover in detail what was covered in the book. Certainly not in a 40-hour training class. A lot of what I wrote about was first hand experience regarding problems that came up as well as ideas that I developed for making mapping of certain scenes easier. If you take a look at the trouble shooting chapter, these are all situations I encountered first hand.”

I asked the authors what they expected the reader to get out of the book. They replied:

(Boots) “The reader will hopefully gain a better insight as to the theory and concept behind how a total station works; many training courses do not include this information. They will also learn the basics and gain valuable insight into how to apply the concepts out in the field. It was written as a ‘How-to’ book regarding the practical application of the equipment out in the field. The reader will benefit from our combined years of experience and techniques we have discovered. It is also a reference book in that all of the components and many of their options are described. This will be helpful to the reader if they need to make any equipment purchases or upgrades to existing equipment. The reader would definitely need to attend a class, and we even indicate in the book in more than one place that the book is not intended to be a substitute for formal training. Most survey supply companies provide 1-3 days of training.

This basically teaches the user how to set up the instrument and take a few shots. The surveyor teaching the class usually doesn’t know anything about Forensic Mapping.”

(Salinas) “What I wanted to accomplish is to have the book serve as a resource for anyone with basic training in the field of FM. For someone who has received no training my hopes were that they could pick up the book and get a basic understanding of the equipment, the various software packages, and make an informed decision when it came time to get started in the right direction.

“I have heard stories of Law Enforcement agencies buying equipment from a survey shop without consulting others. The survey shop provides basic training in how to operate the equipment with no application to the Forensic market.

“This book is not meant to replace any instruction material put out by the manufacturer. If anyone has ever tried reading the instruction manual that came with their Total Station, they would realize that it is geared toward the surveyor who has an understanding of survey practices. The field of Forensic Mapping, although it uses similar equipment as a surveyor, is completely different in a lot of respects.”

If you have any questions about the book – or forensic mapping in general – feel free to contact either author by e-mail. (Boots at [kent@factualdiagrams.com](mailto:kent@factualdiagrams.com); Salinas at [joelsalinas@sbcglobal.net](mailto:joelsalinas@sbcglobal.net).)

If you go to the website (see above), you will find a list of the “Topics Covered by this Book.” Not printed in the published text, but included on the CD-ROM are 13 appendices, including: Court Citations where expert or specialized testimony was permitted by crash/crime investigators on the use of total station technology for diagramming (mapping) crash or crime scenes; a Forensic Mapping Worksheet; mFX Quick Start Reference Guide; and more. (The book has 25 references to “mFX” and I wasn’t sure what that acronym meant. Mick Capman provided an explanation: “Visual Statement uses ‘mFX’ to mean their MOBILE diagramming software, that installs on most Windows-based external data collectors (TDS Recon & Nomad, for example).”

To contact the publishers, you may call Kinetic Energy Press in Salem, Oregon, at 503-540-3479, or send e-mail to: [actar661@cs.com](mailto:actar661@cs.com). Order online at [www.kineticenergypress.com](http://www.kineticenergypress.com).

*(About the reviewer: Joseph E. Badger is an internationally known accident reconstructionist who has had over 100 articles published in such periodicals as Law and Order magazine, Accident Reconstruction Journal, Accident Investigation Quarterly, and others. Having retired after 20 years with the Indiana State Police, Mr. Badger resides in Bloomington, Indiana.)*