

Another Book Review from the desk of Joseph E. Badger, Bloomington, Indiana

International Network of Collision Reconstructionists member, author, 33-year RCMP veteran, traffic crash investigator, reconstruction consultant and all-around good guy R.W. (Bob) Rivers has just penned his 11th and – he says – final book. He spent a lot of time writing the title. EVIDENCE IN TRAFFIC CRASH INVESTIGATION AND RECONSTRUCTION: Identification, Interpretation and Analysis of Evidence, and the Traffic Crash Investigation and Reconstruction Process.

A blurb of the book posted at the publisher's Web site indicates the book has 324 pages. Well, that's a stretch. To be honest, the last numbered page is 295. But gee, it has the "About the Author" page, a title page, list of contributors page, a dedication page, a forward AND a preface.... And it has a "Note," a "Disclaimer" and a word about the Metric System. Then a 10-page table of contents. So, yeah, 324 pages.

It also has 175 illustrations and 13 tables.

Rivers has always maintained that there is a lot more to traffic crash investigations than "speed analysis," and therefore for his ultimate text he covered the entire investigation/process in his new manual. And yet he still covers most of the essential ingredients of speed analysis.

One thing I like about the book aside from its contents is that it's full of friends and memories.

For example, Russ Arend wrote the Foreword. I remember Russ from his heading the "Long Course" at Northwestern University Traffic Institute (now the Center for Public Safety). He went on to establish the Institute of Police Technology & Management (IPTM) at the University of North Florida.

Rivers dedicated his book to Dr. R.C. (Dick) Hodge, IPTM's editor and without whom my own book Trailer Underride: Conspicuity, Human Factors, and Rear Bumpers would never have found the light of day.

Contributors to Rivers' "Evidence Manual" include two INCR members, Al Baxter and George Bonnett. Another contributor and colleague of mine, with whom I was embroiled in a few cases, was the late Bernard Abrams.

Rivers also acknowledged INCR members Frank Navin, John Ruller and my friend the late Charlie Kirk.

The fact that on page 31, Bob Rivers listed one of my articles under the heading “Recommended Reading” didn’t hurt.

Speaking of recommending reading, the bibliography in the back of the book lists a whole bunch of people you know and whom I consider personal friends... Besides the folks whose names I dropped earlier, you will find Tony Becker, Bob DuBois, James Collins, Vic Craig, John Daily & Nate Shigemura, Mike Lofgren, Rudy Limpert, Jim Mitchell, Dan Parkka and Gary Stephens. (Yes, I know, I didn’t list Nate’s name alphabetically because he is inexplicably firmly fixed to John Daily.)

Now that we have all that out of the way, I suspect you’d like to know what’s actually IN the book.

It begins with an Introduction to Traffic Accident Investigation. This is not a three or four paragraph description of the investigation process. It’s almost 30 pages explanation of the investigator’s duties, the accuracy and errors involved, an expert’s responsibilities, plus there’s a nifty checklist – a “Series of Events” – to make sure you don’t miss anything.

The Introduction goes on to define the difference between a fact witness and a lay witness. It explains what the investigation should be prepared to do for trial. Also it presents a history of the Accreditation Commission for Traffic Accident Reconstruction (ACTAR) taken straight from the ACTAR Web site. (Except Rivers chose to substitute “Crash” for “Accident” even though most English-speaking lay persons still calls them accidents. And Bob, we’re not changing the acronym to ACTCR. I mean how would you pronounce that?)

Chapter Two is all about the human element in accident investigation and reconstruction. Written by Martin Kurke and Anne Corbin the chapter delves into human reliability, error, and risk-taking.

Bernard Abrams wrote Chapter Three, “The Role of Vision, Visibility, and Discernibility in Driver Performance.”

Okay, so there’s no such word as discernibility. Abrams was an optometrist, not a lexicographer, so I’ll cut him some slack. We all know the word is discernability, a noun meaning “distinctness that makes perception easy.”

Bernie gets into photopic and scotopic vision, acuity, and factors that can affect vision.

Chapter Four is a two-part chapter dealing with pathology (written by James Ferris) and the medical examination (written by Los Angeles County Medical Examiner Dr. Lakshmanan Sathyavagiswaran). And while the name Lakshmanan Sathyavagiswaran doesn’t fall trippingly off the tongue, you may recall the name mentioned a time or two in the infamous O.J. Simpson trial.)

There are at least two people named Michael Sweet. Probably the more famous Michael Sweet is a Christian rock singer and co-founder of perhaps the most popular Christian rock band ever, Stryper. He had absolutely nothing to do with Bob Rivers' book. The other Michael Sweet – the Bloodstain Pattern Analysis Consultant Michael Sweet – from Edmonton, Alberta, wrote Chapter Five. Which, not surprisingly, is all about Bloodstain Pattern Analysis.

Chapter Six, “Forensic Photography and Scene Measurements,” is in two parts. Robert Wyman handles the photographic applications section while Bob Rivers covers scene measurements and plan drawings.

Rivers managed to write Chapter Seven, “Trafficway Evidence,” all by himself. Trafficway Evidence is what some of us might refer to as “Facts from the Road.” This chapter covers traffic control devices, signals, detectors, timing, pavement edges, glare, debris, scrapes, scratches and grooves, chips, chops and gouges..., and all sorts of tire marks. Bob includes pages of great photos to assist the reader in identifying physical evidence on the roadway.

Chapters Eight (Vehicle Examinations) and Nine (Speed Analysis and Determinations) are both by Rivers. These two chapters – which make up 40 percent of the text – may be why you bought the book in the first place. Each chapter could be a book all by itself.

At Chapter Ten, we have Al Baxter's “Evidence Manual [for] Motorcycle Crash Investigation.” This chapter discusses, among other things: rake, trail, acceleration, braking and turning. And it explains the dreaded lean angle equation for determining the amount of lean required to successfully negotiate a curve.

There's a section on calculating the minimum speed of a skidding or sliding motorcycle (and a sliding rider, whether he's wearing leathers or, heaven forbid, polyesters).

The book's appendices offer all manner of U.S. and SI conversion tables and they are followed by a “Quick-Find Index” which refers to particular paragraphs rather than page numbers. That way, you go straight to what you're looking for rather than just a page where you would have to scan the whole page to find what you wanted.

“Finally,” quoting the publisher's blurb, “there is a comprehensive quick-find index that takes the reader directly to any topic, formulae, or subject matter - or any combination of these.”

The book – EVIDENCE IN TRAFFIC CRASH INVESTIGATION AND RECONSTRUCTION: Identification, Interpretation and Analysis of Evidence, and the Traffic Crash Investigation and Reconstruction Process – comes in both hard cover (\$86.95) and soft cover (\$56.95) and is available through Charles C Thomas, Publisher, LTD., 2600 S. First St., Springfield, IL 62704. (<http://www.ccthomas.com>) Or you may e-mail questions to books@ccthomas.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.)