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

## Forensic Analysis of Seat Belts, 2<sup>nd</sup> Edition.

After 14 years in law enforcement, Donald J. Felicella left the Sunrise, Florida PD in the late '90s and entered the private sector with his father, Don A. Felicella. In 2003, Donald J. wrote *Forensic Analysis of Seat Belts*. Kinetic Energy Press, Salem, Oregon, published it.

The younger Felicella has since revised and expanded the original with larger, full-color photos and charts. 49 new color photographs, 9 new figures, 7 new graphs, and added some new equations.

He also updated the chapters on Interior Vehicle Documentation and Injury Correlation. There are nearly 50 additional pages of information.

The new publication contains up-to-date lists of all seat belt related product recalls and technical service bulletins going back to 1988!

Inside the back cover of the 183-page book is a CD-ROM of the publication that gives the user full searchable access to the text, illustrations and charts.

This new edition is printed in an 8.5" by 11" format with heavy card-stock covers (front & rear) and is bound with GBC<sup>®</sup> comb binding. This format allows the printed page to lay completely flat.

I asked Mr. Felicella how he came to write the book and why. He offered, "I was drawn to accident investigation early on in my law enforcement career; I liked the fact that the investigator would work a crash from the scene to the completion and the technical aspect also intrigued me. Early on in my accident training (mid 1980's) I was amazed that something with such a basic design was one of the most effective devices preventing an occupant from injury and death.

"With that, I started researching various aspects regarding seat belts, how they worked, and advancements in technology, and evidence found on them. Over the years I ended up with boxes of research papers, test results, and cases dealing with seat belts. I was teaching Traffic Homicide Investigation at the local police academy and I would always get positive feedback from students about the seat belt topic and information I provided to them, so I decided to write a book. At the time I started the book project there were no other books dealing exclusively with the topic of seat belts."

As to how long it took to write the book, he said, "... it kind of evolved over a few years."

As to the beginnings of the seat belt (or one word seatbelt – which is also correct), the name Sir George Cayley, 6th Baronet probably doesn't ring a bell. He is credited with inventing the seatbelt back in the  $19^{th}$  century for people in airplanes so they wouldn't fly through the window should their aircraft come to a sudden stop – like against the side of a mountain. But if you really want to know the "History of Seat Belts" read Chapter One of Donald Felicella's book which provides the historical development of seat belts between 1855 and 2012.

Chapter Ten provides all the recalls and technical service bulletins from 1988 to the present (as of April 18, 2012).

Chapters between One and Ten deal with occupant kinematics, inspection of seatbelt systems, and injury correlation, interior and exterior vehicle documentation plus the malfunctions, problems and litigation claims.

The book is available for sale online for \$59 (plus \$4 s&h) at <u>www.kineticenergypress.com</u> or from Kinetic Energy Press, 2351 Sunset Blvd., Suite #170-562, Rocklin, CA 95765. (Telephone 916-770-9475.)

Forensic Analysis of Seat Belts,  $2^{nd}$  Edition is for anyone involved in accident (read: crash) investigation, reconstruction and/or litigation. It contains 163 photos and charts in crystal clear resolution illustrating precisely what is important in seat belt analysis - plus a complete guide to forensic examination and analysis of seat belt systems.

They published the photographs in black and white to keep the cost down; however, if you would like to see the pictures in fantastic color, buy the \$109 version (\$4 s&h). You may view a sample page of the color version at <u>http://www.kineticenergypress.com/images/FASB\_sample.pdf</u>.

For questions about his book – or about seatbelts in general, contact Mr. Felicella at fcenginc@aol.com.

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