

Title: “Event Data Recorders: Proper Evidence Collection in Criminal, Insurance and Tort Liability Investigations”

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Over the last several years, the landscape of traffic accident reconstruction and insurance claims investigations has changed dramatically at the hands of technological advances such as event data recorders (vehicle black box technology). This technology has been challenged on numerous occasions and generally been found to be reliable and admissible under both Frye and Daubert paradigms¹.

The requirement for law enforcement and private insurers to collect and consider this type of evidence in their investigations has not been clearly defined. Law enforcement, insurance investigators and litigators may need to heighten their efforts in the preservation of this critical evidence. A failure to properly memorialize this evidence may ultimately result in evidence spoliation claims by criminal defendants, as well as claims of bad faith by parties involved in civil litigation.

When a law enforcement officer reconstructs a collision with the intent of utilizing the results of the investigation for the furtherance of a criminal prosecution (beyond the scope of a traffic citation or other petty offense) then that officer should preserve any event data recorder (EDR) information. However, this obligation does not normally come at the hands of legislative rule. Only in extreme cases, could law enforcement professionals be statutorily required to preserve EDR data. In Illinois, officials investigating a reckless homicide (reckless use of a vehicle causing the death of another person) are required to “*preserve, subject to a continuous chain of custody, any physical evidence in their possession or control that is reasonably likely to contain forensic evidence*” according to statute 725 ILCS Chapter 5/116-4 (a)².

The mandatory terms of this type of legislation, which demands the preservation and production of all forensic evidence, can be reinforced by the explicit terms of a corresponding criminal code, wherein law enforcement can be found criminally culpable for failures in compliance. Under the Illinois statute, it is “*unlawful for a law enforcement agency or an agent acting on behalf of the law enforcement agency to intentionally fail to comply with the provisions of subsection (a) of Section 116*”³. A violation of this statute constitutes a Class 4 Felony for which an Illinois law enforcement official could be fined up to \$25,000 and/or imprisoned for 1 to 3 years.

Many other states, including Alaska, Arkansas and South Carolina⁴, have similarly worded procedural codes requiring the preservation of all forensic evidence on serious crimes. However, the list of states with legislative requirements for the preservation of evidence expands to an overwhelming majority wherein specific biological or DNA evidence could be collected. While the scope of this additional legislation is not discussed within the confines of this article, it could be argued that only on the rarest of occasions, is blood or other biological material not deposited at the scene of a fatal traffic crash.

Generally, statutory collection and preservation of forensic evidence only occurs on the most heinous criminal offenses. For example, under the Illinois statute, law enforcement does not statutorily assume a responsibility to preserve critical forensic evidence unless it is engaged in the active investigation of the offense of reckless homicide or other Article 9 offense⁵. Therefore, if law enforcement in Illinois is investigating a non-specified offense, such as aggravated driving under the influence of alcohol, wherein the aggravation is based on the death of another person, then law enforcement has no statutory requirement to preserve forensic evidence.

This is not to suggest that law enforcement is inherently granted exemption from proper evidence practices when not explicitly required by statute. Previous courts have ruled that when a strict literal reading of a statute produces an illogical result not contemplated by the legislature, then a court need not accept the literal reading⁶. In fact, it could be argued that preserving forensic evidence as

defined by Illinois law as a reckless homicide is no more crucial than the preservation of evidence in the similarly worded statute for aggravated driving under the influence of alcohol.

The definition of “preserve” does not conclusively mean law enforcement must perform a download of the data contained within an EDR in order to be in compliance with any statutory requirements⁷. It could be argued that law enforcement need only retain the vehicle and its data for the benefit of defendants on criminal prosecutions, thereby shifting the financial responsibility of evidence interpretation to the defendant. While this approach could certainly be defined as a minimalist fulfillment of certain statutory requirements, the tactic would seem to satisfy the legislative constraint.

As of May of 2012, there were only 13 states which had specific laws governing event data recorders⁸. And, while many of these states, via legislative rule, dictate the ownership of EDR data, rules of EDR data imaging and consequences for EDR data tampering, none of the statutes “require” a law enforcement or insurance carrier to preserve EDR evidence.

However, if law enforcement or private insurers fail to preserve evidence from a vehicle EDR, there is a substantial basis for the barring of evidence gleaned from the results of any alternative investigation which ultimately results in a criminal prosecution or denial of coverage benefits. There is an even stronger likelihood in a civil action involving torts, such as traffic accidents, that the failure to preserve EDR evidence will result in severe sanctions.

The US court of appeals in *Pries v Honda*⁹ has already acknowledged the material importance of preserving a vehicle in an accident case by stating, *“the car itself may be the best witness about conditions at the time of the accident. Strong forces leave tell-tale signs in physical objects, signs that can be read by people who know what to look for and have the right instruments.”* Applying this standard to the analysis of EDR evidence, *“people who know what to look for”* could be equated to qualified Crash Data Retrieval Analysts¹⁰, while *“have the right instruments”* could be likened to an up-to-date Crash Data Retrieval Tool¹¹.

*American Family Ins. Co. V Village Pontiac GMC*¹² is an example of sanctions against those parties who have failed to preserve motor vehicles and the material evidence contained therein. In this case, steps were not taken by the plaintiff to preserve the car for inspection. The car was subsequently destroyed by a salvage company. As a result, the appellate court barred all evidence, both direct and circumstantial, concerning the condition of the car, and granted summary judgment for the defendant. The court believed this was an appropriate sanction because the *“plaintiffs intentionally allowed the most crucial piece of evidence [vehicle] in this case to be destroyed.”* This was a civil product liability case, but the spirit of the ruling could be applied to almost any case involving a motor vehicle accident, as the vehicle and its associated EDR data is almost always the most crucial piece of evidence.

In the case of *Welch v United States*¹³, defendant doctors removed a portion of plaintiff-decedent's skull following an operation and discarded it, rather than sending it to the pathology lab. The trial court recognized an examination of the skull bone flap would have proved or disproved the crucial issue in the case and concluded *“where one party wrongfully denies another party the evidence necessary to establish a fact in dispute, the Court should draw the strongest allowable inferences in favor of the aggrieved party.”* The speed of vehicle and manner in which it was being driven is almost always a fact in dispute that could be resolved by EDR consideration. As EDR evidence evolves and becomes more comprehensive in its capabilities, even the number and classification of occupants will become possible¹⁴.

In the case of *Capitol Chevrolet, Inc. v Smedley*¹⁵, the Alabama Supreme Court, in reversing a judgment for the plaintiff, ruled the trial court abused its discretion in not dismissing the case after the allegedly defective van had been *“irreparably lost”* by plaintiff. Although plaintiff's expert took photographs, the Court believed they were insufficient to overcome the prejudice to defendant where defendant's own expert could not examine the van. This would suggest, even in cases where general

photographic evidence has been collected, substantially greater care needs to be taken to ensure the preservation of other evidence, such as EDR data, which could determine a fact in dispute.

With regard to specific sanctions for the failure to preserve recorded evidence, in *Jain v. Memphis Shelby County Airport Authority*¹⁶, the plaintiff was entitled to a "*permissible adverse inference*" as a penalty against the airport authority and the janitorial service when they failed to preserve a video tape that may have captured plaintiff's slip and fall at the airport. The court ruled the janitorial service had a duty to make sure the video was preserved, despite having no immediate control over the video, because the service "*had notice of the possibility of litigation*". This possibility of litigation was a result of the employee's incident report and the defendant's knowledge of the airport surveillance video system.

Expanding this ruling to EDR evidence, the notice of possible litigation might come at the hands of a criminal investigation or claim submission wherein obvious financial loss or personal injury occurred. As EDR evidence expands in its application, it will undoubtedly become less feasible for trained police reconstructionists, insurance investigators or legal representatives to assert they had no knowledge of the existence of said data.

Perhaps the most compelling legal language with regard to the preservation of a recording came in December of 2011 with the Illinois Supreme Court decision: *The State of Illinois, Appellant, v. Marina Kladis*¹⁷. The case specifically applied to the failure to preserve an in-car police video. However, upon examination of the language from the ruling, the case could be easily applied to event data recorder evidence.

In this case, the State failed to preserve the video of a DUI arrest. The State was barred from presenting any testimony from the officer concerning what transpired throughout the duration of time wherein the video would have been recording. In support of their ruling, the Illinois Supreme Court stated, "*If the recording reflects the defendant committing an offense, the State could use it to cement his or her guilt. The reverse is also true: if the recording does not clearly reflect commission of a crime, the defendant could use it in support of his or her defense. In either instance, the recording assists the trier of fact in seeking the truth and at arriving at a just result.*"¹⁸ With the substantial detailed information from a modern EDR¹⁸, the prosecutor, defendant and trier of fact could easily determine if the commission of certain crimes took place by means of a motor vehicle.

This Illinois ruling does not appear to be an anomaly, inconsistent with the other states. In February of 2012, with regard to *Tennessee v Angela M. Merriman*¹⁹, the appellate court confirmed the trial court's ruling, wherein three (3) counts of an indictment were dismissed after the police department lost a video of a traffic violation, pursuit, and subsequent DUI arrest. In its original ruling, the Tennessee trial court concluded the recording contained "*very strong evidence*" of the facts of the case. The evidence could have refuted or supported either party's theory, and in the absence of the recording, the evidence would consist purely of a "*he said, she said*" account of the incident.

Furthermore, there has been a long standing guide for the treatment of electronically stored information in civil litigation. Under the Federal Rules of Civil Procedure, there are specific considerations for protection of electronic data²⁰. This federal rule requires discovery proposals to "*provide for disclosure or discovery of electronically stored information.*" EDR evidence is, by definition, "electronically stored information" and, therefore, likely subject to this federal directive.

If a party to a civil tort failed to abide by federal rule, and neglected to produce electronically stored data it reasonably knew existed, then this failure would likely lead to harsh sanctions. These sanctions could include evidence or testimony limitations, financial sanctions, or the outright dismissal of a complaint.

Beyond the realm of subjecting themselves to claims of evidence spoliation or discovery violations, insurers and legal professionals should be concerned about the lawful definition of bad faith.

In fact, a failure to consider EDR evidence in denying a claim, or failing to preserve EDR evidence in a civil proceeding, may be perilously close to the definition of an act taken in bad faith.

In Illinois, bad faith on the part of insurers can be defined by Section 154.6 of the Illinois Insurance Code²¹. The code contains a list of acts which constitute improper claims practice in Illinois. Those acts consist of *“Refusing to pay claims without conducting a reasonable investigation based on all available information.”* The failure of an investigator to consider the impartial and, at times, copious amounts of evidence from a vehicle’s EDR, would seemingly constitute a lack of contemplation of “all available information”.

A failure to institute a procedure, wherein an insurer could assure the collection of EDR evidence, would not likely protect that entity from potential claims of bad faith. For example, in Section 154.6 of the Illinois Insurance Code, another action that constitutes an improper claims practice is *“Failing to adopt and implement reasonable standards for the prompt investigations and settlement of claims arising under its policies.”* If an insurer fails to “implement reasonable standards” with regard to EDR evidence collection, then the same entity may be exposing themselves to unnecessary legal accusation.

Again, the Illinois code does not appear to be an irregularity, lacking consistency with the other states. In fact, regardless of the state, the principles which generally define bad faith seem consistent. For example, in Florida, under the insurance code concerning unfair claim settlement practices²², it is improper for an insurer to do the following: *“failing to adopt and implement standards for the proper investigation of claims”* or *“denying claims without conducting reasonable investigations based upon available information”*.

While these codes do not specifically dictate the above acts are automatically equivalent to “bad faith”, they have been cited by courts in evaluating an insurer’s conduct in a bad faith setting. For a specific example of bad faith as defined by the courts, one could examine the Illinois Appellate court decision in *Emerson v. American Bankers Ins. Co.*²³. In the ruling, the court defined bad faith as *“inadequate investigation of a claim”, “denial of a claim without obtaining satisfactory supporting evidence”* and *“failure to evaluate a claim objectively.”*²⁴ One of the most thorough and objective forms of information is event data recorder evidence²⁰.

As an insurer, the potential for a bad faith claim arising from a failure to evaluate all available evidence should be a concerning event, as the financial award on a bad faith claim is often enormous when compared with the underlying limits of the policy. As an example, in the Florida case *Berges v. Infinity Insurance Company*²⁴, the awarded judgment was over 2.4 million dollars, including over 600 thousand dollars in attorney fees, when the policy limits were only 20 thousand dollars.

Outside the realm of insurers and parties to a civil tort, it may be more difficult to argue law enforcement’s failure to preserve EDR evidence is an act done in bad faith. In *Arizona v Youngblood*²⁵, the defendant strove for a reversal of his conviction on child molestation charges due to the police department’s failure to refrigerate the victim’s clothing and test semen samples shortly after they were collected. The defendant argued this evidence might have exonerated him. The court, in denying Youngblood’s motion, essentially required potentially useful evidence be destroyed in an intentional or malicious fashion, and not through poor judgment or negligence. Therefore, with regard to law enforcement cases, unless a defendant were able to show the potentially exculpatory EDR evidence was intentionally or vindictively destroyed, then *Arizona v Youngblood*²⁵ would likely dictate the act was not done in bad faith.

This does not provide law enforcement with an unquestionable basis for discounting the data from a vehicle’s EDR. Even if law enforcement was not proven to have acted in bad faith, the prosecution could still be subject to substantial sanctions if it fails to protect EDR evidence. In February of 2011, with regard to *United States v. Flyer*²⁶, the U.S. 9th Circuit Court of Appeals outlined the

potential for sanctions depending on *"the quality of the government's conduct and the degree of prejudice to the accused"*.

The United States v Flyer ruling has been cited on a number of occasions thereafter. For example, in February of 2012, in United States v Zuniga-Garcia²⁷, the prosecutor made a bolt found in the defendant's pocket a substantial part of its case. The prosecutor's own witnesses testified about the bolt, and the prosecutor presented the bolt as inculpatory physical evidence to the jury. However, during the police investigation, numerous tools and other items located in the defendant's car at the time of his arrest were negligently lost or destroyed. The defense argued the bolt came from one of the lost/destroyed tools. The defendant argued the jury should have been given a special instruction as to what the lost/destroyed evidence would have shown.

In their ruling, the 9th Circuit Court of Appeals stated, *"It was equally important that the defendant be able to present evidence that the bolt was on his person for a legitimate reason. The destruction of this evidence left the defendant without any means of refuting an important part of the prosecution's case"* and that *"under Flyer, the balance favors the defendant and the failure to give the requested instruction was an abuse of discretion."*

This case appears to be on point for a criminal prosecution involving a traffic accident, wherein law enforcement fails to retain or consider EDR evidence in their case. The effect of a law enforcement agency allowing for the loss or destruction of a vehicle, or its associated EDR evidence, could easily leave a defendant without any means of refuting an important part of the prosecution's case. Likewise, the prosecution should reasonably know the vehicle and its associated EDR would be of importance to the defendant.

All of the potential pitfalls of inadequate evidence practices suggest law enforcement, private insurers and litigants develop a protocol for effective EDR evidence memorialization. There are numerous published standards by which police agencies, insurance carriers and legal representatives can develop operational procedures.

The American Society for Testing and Materials (ASTM) has developed a number of recommended practices with regard to evidence collection and preservation including Collection and Preservation of Information and Physical Items by a Technical Investigator²⁸, Examining and Preparing Items That Are or May Become Involved in Criminal or Civil Litigation²⁹, and Collection of Non-Volatile Memory Data in Evidentiary Vehicle Electronic Control Units³⁰. The guides speak specifically to proper evidence memorialization, as well as the issues surrounding the collection of electronic evidence from event data recorders.

There are substantial repercussions associated with inadequate evidentiary practices. And, EDR evidence loss or spoliation will likely result in similar consequences, given current legislation and judicial rule. As event data recorder technology continues to grow, both quantitatively and qualitatively, the need for a standardized practice among law enforcement, insurers and legal advocates will expand. The essential resources for incorporating EDR evidence into criminal, insurance or tort liability investigations are readily accessible and can be implemented in progressive fashion if individuals are willing to embrace this powerful technology.

This article was written by Shawn Gyorke, an expert witness specializing in accident reconstruction and crash data retrieval (vehicle black box technology).

1. Florida - Edwin Matos, Appellant, v. State of Florida, Appellate Case No. 4D03-2043 (Frye)
Illinois – Bachman, et al, v. General Motors Corp., et al, Illinois Appellate. Ct., 4th Dist., No. 4-01-0237 (Frye)
Michigan - Michigan v. Wood, 56th Circuit Court, Case No. 02-283-FH (Davis / Frye)
Ohio – Ohio v. Larry Wilson 5th District Court of Appeals, Case No. 05CA5 (Daubert)

2. 725 Illinois Compiled Statutes – Chapter 5/116-4 (a), Titled: Preservation of Evidence for Forensic Testing
3. 720 Illinois Compiled Statutes – Chapter 5/33-5
4. Alaska Statutes § 12.36.200; Arkansas Code A.C.A. § 12-12-104; South Carolina Code of Laws § 17-28-300.
5. 725 ILCS 5/116-4 (a) applies to all offenses as defined under 720 ILCS 5/9 (Homicide Chapter)
6. Millennium Park Joint Venture LLC v Houlihan, 241 Ill.2d 281, 307 (2010)
7. Merriam-Webster Dictionary: Preserve - to keep safe from injury, harm, or destruction.
8. Arkansas, California, Colorado, Connecticut, Maine, Nevada, New Hampshire, New York, North Dakota, Oregon, Texas, Virginia and Washington
9. Pries v Honda, 31 F.3d 543 7th Cir. 1994
10. Crash Data Retrieval refers to the process by which EDR evidence is collected and ultimately analyzed as part of an investigation.
11. A Bosch Crash Data Retrieval Tool is the only commercially available product capable of imaging the data contained within a vehicle's EDR.
12. American Family Ins. Co. v Village Pontiac GMC, Inc., 223 Ill.App.3d 624 (2nd Dist.1992)
13. Welch v United States, 844 F.2d 1239 (6th Cir. 1988)
14. Driver and passenger classification/position is a regulated parameter under NHTSA Title 49 Part 563 if recorded.
15. Capitol Chevrolet, Inc. v Smedley, 614 So.2d 439 (Ala. 1993)
16. Jain v. Memphis Shelby County Airport Authority, 2010 U.S. Dist. (W.D. Tenn. Feb. 25, 2010)
17. The State of Illinois, Appellant, v. Marina Kladis, 2011 IL 110920
18. NHTSA Title 49 Part 563 will require the recording of at least 15 different parameters in specified increments, to include speed, brake switch status, and throttle.
19. State of Tennessee v. Angela M. Merriman, Appeal from the Circuit Court for Warren County No. F-12979
20. Federal Rules of Civil Procedure, Rule 16 - Pretrial Conferences; Scheduling; Management – 16(b)(3)(B)(iii)
21. Illinois Compiled Statutes 215 ILCS 5 Illinois Insurance Code. Section 154.6
22. Florida Compiled Statutes - 626.954 - Unfair methods of competition and unfair or deceptive acts or practices defined — Sub-section (1)(3)(a) & (1)(3)(c)
23. Emerson v. American Bankers Ins. Co., 585 NE 2d 1315 - Ill: Appellate Court, 5th Dist. 1992

24. *Berges v. Infinity Insurance Company*, 896 So.2d 665 (Fla. 2004)
25. *Arizona v. Youngblood*, 488 U.S. 51 (1988)
26. *United States v. Flyer*, 633 F.3d 911, 916 (9th Cir. 2011)
27. *U.S. v. ZUNIGA-GARCIA*, No. 11-50016, United States Court of Appeals, Ninth Circuit.
28. American Society for Testing and Materials (ASTM): Standard Practice for Collection and Preservation of Information and Physical Items by a Technical Investigator (E 1188 – 05)
29. American Society for Testing and Materials (ASTM): Standard Practice for Examining and Preparing Items That Are or May Become Involved In Criminal or Civil Litigation (E 860 – 07)
30. American Society for Testing and Materials (ASTM): Standard Practice for Collection of Non-Volatile Memory Data in Evidentiary Vehicle Electronic Control Units (E2493 – 07)