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**Comments of
Consumers Union of US Inc.
to the
National Highway Traffic Safety Administration
on
Docket No. NHTSA-02-13546; Notice 1
RIN 2127-AI72
Motor Vehicle Safety Standards:
Event Data Recorders**

Consumers Union appreciates the opportunity to offer comments on Electronic Data Recorders or EDRs, devices that record safety information before, during and after motor vehicles are involved in crashes. Manufacturers are now installing EDRs as standard equipment in the vast majority of vehicles and doing so with few guidelines about what kind of data ought to be collected and who owns the data. This notice of proposed rulemaking indicates NHTSA’s intentions to, among other things, give guidance to the auto industry in directing what data EDRs gather, which is an entirely appropriate function for NHTSA.

NHTSA did not propose to require the installation of EDRs in any or all motor vehicles.

Instead, NHTSA is requiring:

- 1) that EDRs voluntarily installed in light vehicles record a minimum set of specified data elements useful for crash investigations, analysis of the performance of the safety equipment, like advanced restraint systems and automatic collision notification systems;

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2) specific data formats; 3) that the survivability of the EDRs and their data be increased by requiring that EDRs function during and after the front, side and rear vehicle crash tests specified in Federal motor vehicle safety standards; 4) vehicle manufacturers to make publicly available information that would enable crash investigators to retrieve data from the EDR; and 5) vehicle manufacturers to include a brief standardized statement in the owner's manual indicating that the vehicle is equipped with an EDR and describing purposes of EDRs.

In this discussion about the importance and limitations of EDRs, we at Consumers Union find ourselves at the intersection of our longstanding interest in promoting auto and highway safety and our longstanding concerns about protecting consumer privacy. The EDR technology – which is present in 65-90% of 2004 passenger cars, according to NHTSA - requires us to confront the enormous data gathering potential of these devices in crash situations, providing a treasure trove of information on the causes of crashes, and critically for CU, the evaluation of safety technologies like seat belts, air bags and ABS performance beyond what a field investigation can provide.

NHTSA concedes that these devices are omnipresent. Along with this boost for information and data gathering about automotive vehicle crashes– information that CU agrees could greatly enhance the development of safer vehicles and safer roads - come genuine privacy concerns. We need to balance both concerns.

Yet the agency has provided neither usage rules nor any guidance whatsoever on the privacy concerns to any of the stakeholders: NHTSA, consumers, manufacturers, law enforcement, or the courts, each of which have an interest in this information - about who retains control and access to the data.

Consumers Union has been involved in efforts to secure greater privacy rights for consumers and to protect data that consumers themselves should control from being given to others without their consent. We believe it is possible to satisfy both concerns – i.e., gather and use valuable safety data and protect privacy - but in doing so some preliminary issues have to be addressed.

Safety Value of EDRs

Holding aside the privacy issues for the moment, CU believes EDRs provide great potential for advancing automotive safety and improved automotive and highway design. To be complete, however, we believe the EDR should gather data prior to the crash and continue until the vehicle comes to rest after a crash. Too much occurs after the moment of impact to leave it out. We were disappointed that NHTSA is not making that a requirement. Further, much of the current information gathered by EDRs is proprietary to each individual manufacturer. We think NHTSA should direct manufacturers not only to collect certain categories of data, but also to standardize the data elements and format of information. We strongly believe that consumers should have access to their own information. We believe such standardization will help address privacy concerns as well. When CU submitted comments to NHTSA last year about what information EDRs should gather, we presented the list below of minimal data that we felt should be gathered:

- Longitudinal and lateral acceleration and principal direction of forces
- Seat belt status by seating location
- Number of occupants and location within/without the vehicle
- Pre-crash data, such as steering wheel angle, brake use, vehicle speed
- Time of crash
- Rollover sensor data

- Yaw data
- ABS, traction control, and stability control data
- Air bag operation data
- Tire pressure data
- VIN (alpha-numeric portion, not 6-digit serial number))

Among CU's recommendations, NHTSA has decided not to require the EDR to record the number of occupants and location within the vehicle, the time of the crash, tire pressure data or the alpha numeric portion of the VIN. Further, NHTSA is requiring seat belt status for front passengers only, whereas CU recommended both front and rear passengers be included. We continue to believe that the data elements we recommended should be the minimum level of information NHTSA requires manufacturers to gather through the EDR.

Privacy Concerns:

Consumers Union supports the use of Event Data Recorders – and might even support a NHTSA requirement that all automakers put them in their vehicles – if the proper steps are taken to secure the motorist's privacy and to insure that the entities that might have access to this information – the insurance company, the police, prosecutors, NHTSA - are restricted in their access and use of the information. According to a recent story in the *Associated Press*, General Motors and Ford Motor now allow outsiders to access data in the EDR by buying a \$2,500 reader built by Vetronix Corp. The company says its primary customers are accident reconstructionists, law enforcement and insurance companies.¹

At present, there simply aren't the necessary proper privacy protections in place to support such a position. Consumers Union made this point in its comments to NHTSA last year,

¹ "Snitch or savior? Car 'black-box' data land in courts," Mathew Rodahl, *Associated Press*, June 28, 2003.

and we echo them again here. NHTSA has done nothing to insure that information gathered by EDRs is the property of the car owner and stays the property of the vehicle owner.

We agree with many commenters that this information is potentially very useful for safety purposes. If NHTSA were the only repository for this information and accepted in through an anonymous tracking and information gathering system, that is perfectly acceptable. However, while EDRs are marketed and presented as a technology to improve auto safety, auto design along with roadway safety and design, NHTSA's website lists the following potential users and consumers of EDR data: insurance companies, vehicle manufacturers, government, law enforcement, plaintiffs, defense attorneys, judges, juries, courts, prosecutors, human factors research, state insurance commissioners, parents' groups, fleets and drivers, medical injury guideline data usage, vehicle owner and transportation researchers and academics, with the auto industry as one of the major future consumers of EDR data. "Once you've created some kind of database, it's difficult to anticipate the potential future uses of that information or anticipate who could be interested," warned David Sobel, head of EPIC. "It could be an employer or spouse, or any number of people who might want some information about where a person was at a particular time."²

This large, broad and unregulated list of people and entities with the potential ability to get access to private information from an EDR without the driver's consent is alarming.

At present, EDRs are programmed to record only 90 seconds or so of data. NHTSA notes in its proposal, "When we use the term 'EDR' in this document, we are referring to a device that is installed in a motor vehicle to record technical vehicle and occupant-based information for a

² "Data from cars' 'black boxes' used in court; privacy concerns raised," Page 1A. Michael Lindenberger, *Kentucky Courier Journal*, September 5, 2004.

brief period of time (*i.e.*, seconds, not minutes) before, during and after a crash.”³ But EDR technology is rapidly evolving and that could change. It may be in the interest of some parties to program the devices to record more data for longer periods of time. As *Automotive News* noted recently, “And who is to say that recording a few seconds of data might not lead to recording a few more seconds, and a few more seconds, until automotive black boxes record and retain information constantly just like the ones on the plane?”⁴

The minimum privacy protections listed below would have to be in place:

- 1) the information from the EDR is downloaded directly to NHTSA with only make, model and model year identified and the VIN with all but the identifying serial numbers included, or
- 2) the vehicle owner gives her or his consent that this information be shared and does so voluntarily, and not as a condition of continuing to receive insurance, or based on any other condition.

We don’t include commercial vehicles in our sphere of privacy concerns here. We believe an employer has the right to gather crash information involving a vehicle it owns.

David Snyder of the American Insurance Association noted recently that EDRs are increasingly being used in litigation. “It can be a key piece of evidence. This would revolutionize third party claim settlements,” he told the *Washington Post* in August. The *Post* article noted that “courts can order the release of information and search warrants can be used to obtain it.”

Indeed, a legal order may not even be needed. There are already companies, for a fee, offering to harvest black box information and secure a data vault for these providers to transmit and store information for secure viewing by insurance claims professionals. And newer EDR

³ Federal Register, June 14, 2004, NHTSA, Event Data Recorders, p. 32933, Docket #2004-18029.

⁴ *Automotive News*, November 15, 2004, “Big Brother is riding shotgun,” Bob Gritzinger.

systems - including automatic collision notification systems or ACNs, allow for data collection over communications networks. Last year, according to the Electronic Privacy Information Center, the FBI procured a wiretap order requiring an ACN provider to remotely configure the system to go into listen mode, allowing audio surveillance of the vehicle. A court held that the ACN provider was required by statute to assist law enforcement in carrying out such orders.

This illustrates, once again, that our concerns for the privacy rights of consumers are well-founded.

State Laws

The state of California has passed a law requiring disclosure to motorists information that there is an EDR device in their car and requiring that consumers give permission to download any of the data. Last August Governor Arnold Schwarzenegger signed a law prohibiting rental car companies from using global positioning satellite data to enforce speed and in-state driving restrictions. We think California is on the right track and know that at least 9 other states are considering similar legislation. In Connecticut, Acme Rent a Car stopped charging extra fees for drivers' speeding, something the company learned by downloading data from the rental fleet's EDRs, after hearing from complaining customers.

Progressive Insurance Company has launched a test program in Minnesota that allows customers to have monitors on their cars that record speed, miles traveled and time of day the driving occurred in exchange for a 15% discount on insurance. And though a Progressive spokesman says “. . . I don't think we're ever going to get to a point where we're saying we won't insure you unless you have this device,”⁵ we're not so sure. We can foresee a time when insurance companies might very well require the use of EDR data as a condition of automobile coverage.

⁵ Id.

Ownership of EDR Data

NHTSA has, unfortunately, opted to argue that privacy is not its responsibility. NHTSA goes on to say that even it were NHTSA's responsibility, the agency doesn't think their proposal creates any privacy problems and whatever privacy problems exist, NHTSA argues are covered by a variety of federal and state laws NHTSA doesn't administer. To quote NHTSA, "...our role in privacy is a limited one. For example, we do not have the authority over such areas as who owns the information that has been recorded."

This is a retreat from the agency's 1999 working group report on EDRs which noted, "It is the NHTSA position that the owner of the subject vehicle owns the data from the EDR. In order to gain access to the data, the government would have to receive a release for the data from the owner of the vehicle."

In practice, the owner of the vehicle does not have control of the information being gathered – or that it is gathering in the first place. In a recent fatal accident in Northern Virginia, a 17 year -old girl driving a Cadillac Escalade carrying six members of the local crew team was charged with reckless driving when one of her passengers was killed. Her SUV rolled over as she tried to change lanes and realized a car was approaching and tried to swerve quickly back into her lane. Police investigators obtained a search warrant to examine the vehicle's EDR.⁶

We find NHTSA's current position most disturbing. The only nod NHTSA is giving to privacy concerns is the proposed requirement that auto manufacturers include a statement indicating the existence of an EDR in the owner's manual. Auto industry experts estimate that only a small percentage of vehicle owners ever read their manual – and even fewer would not read it prior to purchase.

⁶ "Girl Charged in Crash Fatal to N.VA. Rower," B4, Leef Smith, *Washington Post*, November 16, 2004.

Even EDR manufacturers have expressed concerns. RoadSafety President Larry Selditz said his company has installed about 10,000 black-box systems in 10 years, mainly in high risk fleets such as ambulances. “Our system is like being able to sit next to your teenager when they drive. My concern is, who is going to get the data and how’s it going to be used? None of us wants Big Brother watching. I don’t want an invasion of my privacy. I never want to see this mandated.”⁷

VINs

Though Vehicle Identification Numbers (VINs) are not included in the data NHTSA’s proposal requires be collected, they are often included in actual EDR systems. The OnStar system stores and transmits the VIN over wireless networks, for example. The first 11 of the seventeen digit VIN code offer important and anonymous crash information for NHTSA researchers. The remaining six digits are the unique serial number identifiers. NHTSA should require in its final rule that identifying information is not collected by the EDR.

Independent Testing and Performance Standards for EDRs

We also want to address the fact that automobile manufacturers design and install EDRs with no checks and balances for accuracy from any independent entity. This is disturbing. The data an EDR records could be decisive in a criminal or civil case. Further, a driver’s insurance coverage might someday depend on information collected from an EDR. Important rights could be at stake. We urge NHTSA to take on the responsibility of examining the varied EDR technologies and to set performance standards to insure that EDRs are operating accurately. NHTSA should identify the weaknesses in the EDR technology that could lead to the gathering

⁷ “Black boxes are moving from airliners to autos,” P. E1. Benny Evangelista, *San Francisco Chronicle*, September 2, 2002.

of inaccurate or misleading data, and put in place a system for conducting periodic checks of EDRs on a variety of vehicles.

This is not a trivial issue. The accuracy of these devices has been called into question. According to the National Motorists Association,⁸ Maine Governor John Baldacci was driving with a state trooper when they hit a patch of ice on a wintry day. The Chevy Suburban they were driving skidded, turned 180 degrees, hit trees and ended up on its side.

Law enforcement is increasingly using data downloaded from the EDR against motorists. However, in this case law enforcement did the opposite. State police came to the defense of the trooper, as did the governor's office. The trooper said he was going 55 mph when he passed a car next to him. A police investigation placed the speed at between 55 and 65 mph. But the black box data downloaded from a Chevy Suburban recorded the speed at 71 mph. But the trooper and the governor's office claimed that the EDR information was inaccurate.

Who has the most accurate information? If a tire's wheels are spinning on ice, the vehicle black box may register a speed far higher than the speed at which the motorist was traveling? Would the average motorist be believed if he or she challenges the information gathered by the EDR? The trooper has not been charged with speeding during this accident, and he continues to serve as the governor's driver.

Further, the National Motorists Association contends that the EDR indicated that Governor Baldacci was not wearing his seatbelt, whereas the governor's office claims that he was definitely wearing the seatbelt during the crash. The state trooper agrees that the governor was wearing his seatbelt and says he unbuckled the governor's belt after the crash. Further, the treating hospital staff has stated that the governor's injuries were consistent with his being belted during the accident. Maine's Public Safety Commissioner wrote after the accident, "the clear and

⁸ National Motorists Association May/June 2004 newsletter.

convincing physical evidence and interviews of the involved parties were sufficient to satisfy the questions raised by the conflicting data and it is the State Police conclusion that Governor Baldacci had his seat belt buckled.”

In another case that gathered less notoriety, a woman named Nicole LaFrenier was accused of causing a February 24, 2004 crash in which three young men died. Her Camaro slammed into a tree. Her lawyer obtained a court order and had an accident reconstruction firm download information from the Camaro’s EDR. Although police investigators determined LaFrenier was the only one in the car wearing a seat belt, the black box indicated she was not. “There are two or three things we know that are wrong that are contradicted by the police,” Timothy Rien, her attorney, told the *Kentucky Courier Journal*. “They are not infallible.”⁹

This illustrates our concerns. The governor of Maine is involved in an accident and the EDR data conflicts with his recollections about the accident as to speed and seat belt usage. Because he is the governor, and has witnesses willing to back him up, he is able to credibly challenge the EDRs findings. But would an average citizen have these advantages?

For these reasons, we think it is of critical importance that NHTSA play a central, independent role in evaluating the accuracy of these devices. Applied technologies are fallible, they make mistakes. There needs to be an outside, independent entity looking at how data are measured and how accurate they are.

In proposing the EDR data standards, NHTSA is creating a new industry-wide data collection regime and must take responsibility for the privacy implications created, a point that is made in comments to NHTSA by the Electronic Privacy Information Center, which recommended in comments to NHTSA that the agency adopt the series of eight core principles known as Fair Information Practices on which our federal privacy statutes are based. Many

⁹ *Kentucky Courier Journal*, September 5, 2004.

privacy risks evolve incrementally. They can seem trivial until we look a little deeper and explore the potential of EDR technology, which is developing rapidly as the FBI ACN example above shows.

Within NHTSA's proposal on EDRs, so many unanswered questions implicating fundamental civil liberties remain. Who owns the data your vehicle is recording about your driving when a crash occurs? Should that data be used in criminal or civil trials when the owner had no idea the device was in her or his car and has not consented to the use of the data? When the devices evolve and begin to collect more data, how will those data be used? How can the public determine the accuracy of the data gathered by and EDR? Who has the say over what data is collected, beyond what NHTSA requires, in new vehicles? What is the consumer's role?

Conclusion

The presence of EDRs in the vast majority of vehicles manufactured today raises issues of self incrimination, unreasonable search and seizure, as well as privacy issues that no person or entity, including NHTSA, seems willing to address. Before the public can get the safety benefits of these devices, NHTSA should resolve these serious privacy issues that we and others have raised.

December 2, 2004

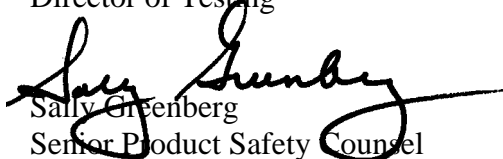
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