

Statement of Clarence M. Ditlow
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On Delays in National Highway Traffic Safety Administration (NHTSA) Rulemaking
Before the Subcommittee on Oversight, Federal Rights and Agency Actions
Senate Judiciary Committee
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Mr. Chairman, members of the Subcommittee, thank you for the opportunity to testify on delays in rulemaking at NHTSA. I am Clarence Ditlow, Executive Director of the Center for Auto Safety (CAS) founded by Consumers Union and Ralph Nader in 1970 to be a voice for consumers on auto safety. The Center has watch dogged NHTSA and the auto industry for 40 years. NHTSA is a wonderful agency with a vital mission but it is woefully underfunded, understaffed and outgunned by the industry it regulates. Unlike FDA, EPA and other agencies, it doesn't even have its own research lab on which to base its actions; instead it rents space from Honda.

During first five years after its creation in 1966, NHTSA issued more safety standards than it did in the next forty years. Many of the original standards such as seat back strength and head restraints are woefully out of date. With rare exception, revision of the original standards or issuance of major new standards came from Congressional mandates. Today, standards issued by NHTSA on its own tend to be relatively minor or without significant industry opposition such as low-speed vehicles, wheel chair lifts, and alternative fuel systems.

After the seminal rulemaking by NHTSA, the history of the agency has been one of an agency where Congress has to intervene as a major safety issue emerges that the agency is unable to resolve or lacks authority. Some examples of Congressional intervention are:

1974 Amendments, Pub Law No. 93-492 - Required Recall Repairs to Be Free, Mandated FMVSS 301 Fuel System Integrity Take Effect, Required 8 Schoolbus Safety Standards, Upgraded Defect Notices, Provided Right of Public to File Defect Petitions, Doubled Civil Penalty

1991 ISTEA, Pub Law No. 102-240, Required Full Front Seat Airbags, Revised Head Injury Rule

1998 TEA-21, Pub Law No. 105-178, Required Improved Airbag Rule

2000 TREAD Act, Pub Law No. 106-414, Required Revised Tire Safety Standard, Tire Pressure Monitoring, Early Warning Reporting System, Increased Civil Penalty to \$15 Million

2002 Anton's Law, Pub Law No. 107-318, Required Booster Seat, Lap & Shoulder Belt Rules

2005 SAFETEA-LU, Pub Law No.109-59, Required Rollover Prevention, Side Impact, Roof Crush, Occupant Ejection, Power Window Switch Rulemakings, Crashworthiness Ratings & 15-Passenger Van Safety

2007 Cameron Gulbransen Act, Pub Law No. 110-189 - Required Backover, Power Window, Brake Shift Interlock Rules.

2010 Pedestrian Safety Enhancement Act - Alert Sound from Electric/Hybrid Vehicles

2012 MAP-21, Required Child Side Impact & Better Anchors Rules, Required Rear Seat Belt Reminder and Seat Specification Rules, Increased Civil Penalty to \$35 Million

Whether it's the Chevrolet Corvair in the 1960's, the Ford Pinto and the Firestone 500 tire in the 1970's, the Audi 5000, Chrysler minivan tail gate and GM pickups with side saddle gas tanks in the 1980's, the Ford Explorer and Firestone Wilderness & ATX tires in the 1990's, Toyota sudden acceleration in the 2000's, or Jeep fuel tanks today, there's a common thread: Out-of-date and inadequate safety standards coupled with enforcement efforts playing catch up to an industry

striving to run out the statute of limitations. If the industry wins the bet and the agency never catches up, individual companies can save hundreds of millions of dollars in avoided recalls as Toyota bragged about in sudden acceleration. If they lose and contain the loss at NHTSA, the worst case scenario is a fine of \$35 million. If the defect goes public, the cost to the auto companies is far greater in lost sales and reputation. But as history has shown, only one or two defects go public every decade. What goes unsaid is that the innocent bystanders, the consumers, pay with their lives.

As shown by the above examples, failure to issue effective rules result in large recalls that cost the auto industry lost profits and the public lost lives. Take the following examples:

Electronics: In the mid-1970's NHTSA anticipated the increased use of electronics in vehicles and potential hazards associated with their use beginning with the use of electronic ignitions in 1975. Lacking resources and personnel to adequately evaluate electronic controls, the agency contracted with the Institute for Telecommunications Sciences to assess the potential and methods for electronic magnetic interference (EMI) to cause malfunctions in the electronic controls in vehicles.¹ In a second research phase, the Institute produced Guidelines for Electromagnetic Compatibility (EMC).² Although the agency intended to develop safety standards for electronic controls, no standards were issued.

With the advent of electronic ignition systems and cruise control systems in the late 1970's and early 1980's sudden acceleration complaints without clear mechanical failures began to appear. NHTSA opened more and more sudden acceleration investigation. Some resulted in recalls for electronic control failures. The first two Toyota sudden acceleration recalls were for replacement of the cruise control computer which could cause sudden acceleration on start up (86V-132, 90V-040). Even though NHTSA determined the cruise control computers caused the sudden acceleration, it had to give the computers to Toyota to find the failure mode, a short in the printed circuit board.

Today we still have no safety standard for electronic controls and computer processing units (CPU's) using embedded software in motor vehicles even though vehicles employ 50 or more CPU's. Although NHTSA turned to NASA during the Toyota unintended acceleration (UA) investigations, NASA concluded: Due to system complexity . . . and the many possible electronic hardware and software systems interactions, it is not realistic to attempt to 'prove' that the ETCS-I cannot cause UA's. Today's vehicles are sufficiently complex that no reasonable amount of analysis or testing can prove electronics and software have no errors. Therefore, absence of proof

¹[NHTSA Study: "Investigation of Electromagnetic Interference Effects on Motor Vehicle Electronic Control and Safety Devices"](#) - Oct. 1975

²[NHTSA Study: "Electromagnetic Interference Effects on Motor Vehicle Electronic Control and Safety Devices, Volume I - Summary"](#) ; [NHTSA Study: "Electromagnetic Interference Effects on Motor Vehicle Electronic Control and Safety Devices, Volume II - Measurements, Analysis and Testing"](#); [NHTSA Study: "Electromagnetic Interference Effects on Motor Vehicle Electronic Control and Safety Devices, Volume III - Automotive EMC Guidelines"](#) - Nov. 1976.

that the ETCS-I has caused a UA does not vindicate the system. “ A team of 4 software engineers from the [Barr Group spent 18 months](#) examining the Toyota electronic throttle source code using the NASA analysis as a starting point and found what NASSA would have found had it not been shut down – Toyota’s source code “is defective and contains bugs” and the electronic throttle control system (ETCS) fail safes are defective and inadequate.

What NHTSA does not have in the way of safety standards which FAA has and which voluntary standards organizations like IEEE has is a process safety standard to ensure the validity and safety of computer code used in electronic systems with safety critical functions. The increasing number of [NHTSA safety recalls for software changes](#) indicates the need for a software verification standard.

Fused Circuits: In 1972, Dr Carl E Nash of the Public Interest Research Group petitioned NHTSA to require electrical circuits in vehicles to be fused but NHTSA took no action. In the years, NHTSA defect investigations led to some of the largest recalls ever including [9 million Fords for ignition switches](#) that shorted out and caused dash fires. Just five years later, NHTSA forced Ford to recall 16 million more vehicles for [defective cruise control deactivation switches](#) that shorted out and caused fires. Tragically in both cases, the fires could start when the vehicles were parked in garages and burned houses down.

BTSI: In the 1980's and 1990's, there were many hundreds of deaths caused by rollaway vehicles where an unattended car shifted out of park and rolled away or where a driver shifted into gear and mistakenly pushed the gas pedal instead. These lead to numerous investigations and recalls such as [23 million Fords](#) for failing to hold in Park and [251,000 Audi's](#) and 185,000 Nissans for sudden acceleration. Chrysler avoided a safety recall only by [doing a service campaign to install a BTSI](#) on its 1993-95 Grand Cherokees. Ultimately Congress required BTSI installation in all vehicles by September 1, 2010.

Airbag Deaths: In 1998, Congress required NHTSA to issue a revised airbag standard that protected small women and children in low speed airbag deployments. In the 1970's when NHTSA was issuing the first airbag rule, the agency proposed a no-deploy at 12 mph requirement and CAS proposed testing for all size occupants. The auto industry vigorously opposed both requirements which were dropped. Indeed, in upholding the airbag rule, a unanimous Supreme Court pointed out: "For nearly a decade, the automobile industry waged the regulatory equivalent of war against the airbag and lost - the inflatable restraint was proved sufficiently effective." ³

Tires: One of the original safety standards issued by NHTSA regulated passenger vehicle tires. In 1978, Congress held extensive hearings on what became the [largest tire recall ever, the Firestone 500 steel-belted tires](#) when CAS successfully campaigned to get 19.5 million Firestone tires recalled. Unfortunately, one of the key recommendations of the Committee to upgrade Federal Motor Vehicle Safety Standard 109 was never acted on by NHTSA. FMVSS 109 which sets performance standards for tire strength, endurance and high speed performance was developed in

³*State Farm Mutual Automobile Insurance Co. v. DOT*, 463 US 29, 49 (1983).

the late 1960's and early 1970's when there were very few radial tires and no SUVs on the road. NHTSA withdrew the only enforcement action it ever brought under the standard because it was so vague and difficult to enforce.

On August 9, 2000, Bridgestone/Firestone (Firestone) and Ford announced jointly that [Firestone would recall approximately 14.4 million](#) ATX, ATX II and Wilderness AT tires that were original equipment on Ford vehicles. The recall came after only after intense public scrutiny and an estimated \$2 billion cost to Ford and Firestone. Although there are many similarities between the Firestone 500 and the Firestone/Ford tire failures, there is a key difference -- the role of the vehicle on which the tires are mounted. In the Firestone 500 recall, there were more tires and complaints (14,000 then versus 2,400 in the ATX/Wilderness) but fewer deaths (41 then versus 240). The primary vehicle in which Firestone ATX, ATX II and Wilderness tire tread separations and deaths have been associated was an SUV which is far more likely to roll over than a passenger car, and when it rolls over, its occupants are likely to be injured.

As a result of Ford/Firestone, Congress passed the TREAD Act in 2000 and did what it didn't do in 1978, mandated NHTSA to issue revised Federal Motor Vehicle Safety Standards for tires.

Conclusion: An oil industry executive once told me that he asked his counterparts at the auto industry why they opposed virtually every NHTSA regulatory proposal when so many were so minor. The answer was that we tie them up in so many little things, they never get to the big ones.

This hearing provides a unique opportunity to examine the regulatory process at NHTSA and ask how the rulemaking process can be improved to not only reduce the unacceptable toll of death and injuries on the nation's roads but also provide stability to the auto industry which suffers from lack of public confidence and sales when preventable defects such as Ford Explorers that roll over when Firestone tires fails, Toyota unintended acceleration and exploding Jeep fuel tanks occur. The federal government through the National Highway Traffic Safety Administration should lead the way to vehicle safety and not clean up afterwards.