

On Heels Of IIHS Tests

NHTSA Promises New Fuel Tank Standard

The National Highway Traffic Safety Administration has promised that before this summer ends it will issue a rule aimed at improving fuel tank integrity.

The promise came from NHTSA's Acting Administrator James E. Wilson in a letter to the Washington-based Center for Auto Safety. Wilson was responding to a Center inquiry about NHTSA's fuel system rule making activity. In that inquiry, the Center pointed to recent Insurance Institute for Highway Safety crash tests as further evidence that NHTSA should act to improve fuel system crashworthiness.

Results of these crash tests were shown on May 29, 1973, to the House Committee on Interstate and Foreign Commerce Subcommittee on Commerce and Finance. (See *Status Report*, Vol. 8, No. 11, May 29, 1973.) The same day IIHS transmitted films of the crash tests to NHTSA's fuel system rule making docket. Rep. John E. Moss (D-Cal.), chairman of the subcommittee, has asked Transportation Secretary Claude S. Brinegar for a full report on NHTSA's fuel system rule making activity.

In his letter to the Center for Auto Safety, Wilson said that "around Aug. 1, 1973," the agency will issue an upgraded fuel system integrity standard and at the same time will propose additional amendments to the rule.

An NHTSA attorney has told *Status Report* that "we're going to do our best" to meet the Aug. 1, 1973, deadline promised by Acting Administrator Wilson. He said it "would be inappropriate" for him or other agency officials to comment on requirements or effective dates until NHTSA actually issues the rule.

NHTSA's current rule on fuel tank integrity (FMVSS 301) was issued Feb. 3, 1967. The rule limits fuel system leaks in cars to no more than one ounce of fuel per minute after a 30 mile per hour head-on crash into a barrier. Crash modes other than head-on are not covered by the current standard.

In January, 1969, the agency proposed that the rule be broadened to

Inside

- NHTSA May Drop Speed Control Plan . . . Page 3
- Puerto Rico Gets First Mandatory Belt Law . . . Page 5
- School Bus Maker Hits DOT For Safety Delays . . . Page 6
- Vehicle Recall Practices Lax In Puerto Rico . . . Page 7
- Small Car Boom Predicted By Henry Ford . . . Page 8

include rear-end impact tests. That proposal was never finalized into a rule. In August, 1970, the agency proposed another plan to improve fuel tanks. That proposal – not yet adopted – would have added to the current front end crash requirement a 20 mile per hour rear-end barrier impact test as well as a rollover test. When it issued the proposal, the agency said that these proposed requirements, “if implemented, would significantly reduce the likelihood of fuel spillage fires.”

Two years after that proposal – in July, 1972 – the Center for Auto Safety tried to prod the agency to action by petitioning NHTSA “to amend and upgrade” its current fuel system standard. The Center said that NHTSA’s footdragging on fuel system integrity has “few parallels in terms of bureaucratic delay.”

‘AMERICA BURNING’

The Center has also called NHTSA’s attention to a little-publicized report issued in May of this year by the Presidentially established National Commission on Fire Prevention and Control.

According to the Commission, the report, entitled *America Burning*, presents its view of “the most significant fire safety problems, and the greatest opportunities for fire loss reduction.” One Commission recommendation is that “the Department of Transportation set mandatory standards that will provide fire safety in private automobiles.”

Among other things, the Commission reported:

- “. . . fires in motor vehicles cause almost 35 per cent of all fire deaths in the United States. In fact, more than 450,000 fires occurred in cars and trucks in the United States in 1971, causing upward of 3,500 deaths . . .”
- “Since gasoline spillage is a common cause of vehicle fires, the location, construction and security of fuel tanks are important design features for fire safety. The most severe losses, in terms of both life and property, occur from fires following rear-end collisions. Next in importance are rollover accidents, followed by front-end collisions.” (NHTSA’s current standard addresses only front-end crashes.)
- “. . . The indications, then, are that motor vehicles, especially cars, are not as fire-safe as modern technology would allow. Improvements could be made in design and materials, without significant additional costs.”

Copies of the Commission’s 177-page report are available for \$2.35 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The report stock number is 5200-00004.

Quoted Without Comment

Volvo believes that we should leave no stone unturned to produce the safest vehicle, designed for and around the human element. We definitely do not believe that man should conform to the machine, but that the reverse is true. – Excerpt from April 2, 1973, letter of Dr. Lauritz S. Larsen, Volvo’s director of safety and environment to the National Highway Traffic Safety Administration.

NHTSA May Drop Speed Control Plan

If current staff recommendations hold up, the National Highway Traffic Safety Administration will soon abandon its six-year-old proposal that new vehicles be required to have built-in speed ceilings.

The safety administration's interest in putting a built-in speed limit in automobiles was first indicated in 1967 when the agency announced it was "considering" the requirement of "maximum speed control on passenger cars, multipurpose passenger vehicles, trucks, buses and motorcycles." It asked for comments from the public on "maximum speed control performance requirements that would ensure reliability, correct operation, and the incorporation of fail-safe features without adversely affecting vehicle performance, and provide security against tampering."

The agency got 150 responses to that 1967 request for comments. It said that "147 of (the) 150 replies were opposed and the latter responses included automotive industry and others with strong reasons for opposition."

That initial request for comments was followed in 1969 by an agency staff report entitled *Maximum Safe Speed for Motor Vehicles*. The report urged the agency "to control speed at 90 miles per hour as a beginning and work down as public acceptance grows and more evidence is gathered to show the additional payoff at lower maximum speeds."

The report pointed out that, based on crash data in one surveyed state, "fatalities might be reduced in the order of 13 per cent if the speed maximum were set as low as 60 miles per hour," and with a 70 mile per hour maximum, an "eight per cent drop in fatalities might be achievable." (An eight per cent reduction in fatalities for the nation would mean approximately 4,000 lives as well as thousands of additional injuries per year. Data are "inadequate for the purpose of quantifying hazard-casualty-speed relationships" for speeds above 80 miles per hour, it said.)

In the winter of 1970, apparently ignoring its own comprehensive staff report, NHTSA issued a proposal that would have prohibited the manufacture of cars, multipurpose passenger vehicles, trucks, buses and motorcycles capable of exceeding the much higher speed of 95 miles per hour. Additionally, the proposal would have prohibited speedometers that register speeds in excess of 85 miles per hour. It also called for a warning system that would activate a vehicle's headlights and horn whenever the vehicle exceeded an 81-85 mile per hour speed range — an approach on which no research has been carried out by NHTSA.

The safety administration received almost 25,000 comments on its 1970 proposal. They were split almost half and half between those who favored and those who opposed the speed control proposal. A 1967 CBS television poll of 1,081 drivers found that 52 per cent of those surveyed favored built-in speed limiting devices.

According to an NHTSA summary of comments that the agency received on its 1970 proposal:

- "There were 11,700 in favor of the proposal or 48%, with 2,950 in favor of lowering the [speed limit in the] proposal.
- "There were 12,600 against the proposal or 52%, with 2,200 against governors. [Many of those comments were in the form of petitions from car buff organizations.]

- “The insurance industry is completely in favor of the maximum speed control, but they recommend lowering the maximum limit. . . .

- “There were 20 automobile manufacturers who responded with 9 domestic and 11 import manufacturers. The general consensus of the automobile industry is that they oppose the maximum speed control limitation, but some feel that a warning system would be useful as a deterrent to high speed.

- “There were 10 equipment manufacturers who responded to the docket with the majority in favor of the proposed standard.

- “There were six automobile clubs that responded with all against the proposal; both the warning and control parts of the proposed standards.

- “There were six state safety organizations that responded with five in favor of the proposal with one definitely against the proposal.

- “Most law enforcement agencies and individual policemen are in favor of the maximum speed control of motor vehicles. However, they do recommend that police vehicles be excluded.

- “The National Transportation Safety Board is in favor of a maximum speed control and warning system, but they recommend the maximum limit be lowered to 80 miles per hour.

- “The Physicians for Automotive Safety are generally in favor of a maximum speed control and warning system, but they suggest that the maximum limit be lowered to 80 miles per hour.

- “The Chairman of the Public Works Committee, Senator Jennings Randolph, is in favor of the proposal, but he suggests that the maximum limit be lowered to 80 miles per hour with the warning at 70 miles per hour.

- “All of the car clubs, motorcycle groups, and car magazines were opposed to the motor vehicle safety proposal. However, they only addressed the fact they were against governors.”

Among those commenting on the 1970 proposal was Dr. Alexander Cohen, chief of the Department of Health, Education and Welfare’s National Noise Study. Cohen opposed the use of auto horns as a speed warning mechanism because of “its potential for aggravating environmental noise problems.”

Now, Acting Safety Administrator James E. Wilson is considering a staff proposal that the agency scrap the built-in speed ceiling part of the plan altogether. Reportedly, NHTSA officials are recommending that the horn and headlight warning system aspects of the proposal remain essentially as they were proposed by the agency in 1970.

An NHTSA source told *Status Report* that the 95 mile per hour built-in speed ceiling that was proposed in 1970 is not considered cost effective in terms of the number of lives that would be saved at that speed. If top speeds were held to 75 or 80 miles per hour, the built-in speed ceiling approach “might be cost effective” he said. The agency estimates that the headlight-horn warning system would cost no more than five dollars. A 95 mile per hour speed limiter would cost about fifty dollars, he said.

He termed speed control a “hot political issue.”

In its 1970 proposal, the agency claimed that issuance of the standard “may result in substantial reduction in the cost of manufacturing vehicle power plants.” Such a reduction would most likely occur if manufacturers were to use engine design rather than so-called speed governors to limit speed.

NHTSA's most recent program plan says that the agency plans to put its standard – or what remains of it – into effect Sept. 1, 1975. (See *Status Report*, Vol. 7, No. 22, Nov. 27, 1972.) The agency's 1970 proposal had called for the plan to become effective Oct. 1, 1972.

Copies of *Maximum Safe Speed for Motor Vehicles* are available for \$1 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Single reprints are also available of "Speed Does Kill," one in a series of loss reduction articles co-authored for the *National Underwriter* magazine in 1969 by IIHS President William Haddon, Jr., M.D. and Ben Kelley, IIHS communications vice president. Single copies of the series may be obtained at no charge by writing "Underwriter", Insurance Institute for Highway Safety, Watergate 600, Washington, D.C. 20037.

Puerto Rico First With Mandatory Belt Law

Puerto Rico has become the first major political unit of this country to adopt a mandatory safety belt use law. The law, which was signed May 30, 1973, becomes effective Jan. 1, 1974.

The law will apply to almost everyone who rides in a safety belt equipped vehicle. Persons exempted from wearing belts include those with "medical or physical reasons," those with "occupational reasons," "children for whom the use of the belt would constitute a risk to their person," and deliverymen when the speed "of the vehicle between stops does not exceed 15 miles per hour." The law also permits non-use when "the belt which is adjusted over the shoulder interferes with the operation of the vehicle."

The law carries a fine of "not less than ten dollars nor more than twenty-five dollars" for each violation.

Transportation Secretary Claude S. Brinegar has asked the Congress to urge the 50 states to make safety belt use mandatory.

Although the congressional action that Brinegar is seeking would have no force in law, he said it would "focus national and international attention" on the need for laws to require belt use.

Last year the National Highway Traffic Safety Administration proposed that states be required to adopt such laws. (See *Status Report*, Vol. 7, No. 14, Aug. 7, 1972.) The proposal was part of NHTSA's attempt to revise its Highway Safety Program Standards. However, Brinegar said that final action on that proposed requirement and other proposed changes in the program standards "will not be taken until sometime next year."

In effect, the House has already voted to support state-level belt use legislation. It did so when it passed its version of the Federal-aid Highway Act of 1973. That bill, which is now in House-Senate conference, would allow DOT to increase a state's highway safety funds by 25 per cent if the state has a mandatory safety belt law. (See *Status Report*, Vol. 8, No. 9, April 24, 1973.)

In a letter to the Congress, Brinegar put aside so-called constitutional questions that have been raised by opponents of mandatory belt use laws. "There is considerable precedent for state and local highway safety laws that require an individual to take action that protects himself as well as others, including laws against speeding, anti-jaywalking laws and motorcycle helmet usage laws," he said.

The Car and Truck Renting and Leasing Association, an organization that represents most of the vehicle rental firms in the U.S., recently endorsed and called for state level mandatory safety belt use legislation.

School Bus Maker Hits DOT For Safety Delays

A school bus manufacturer has told a House subcommittee that the Department of Transportation is guilty of "inexcusable" delay in issuing standards that would raise the level of protection for children riding in school buses.

Charles D. Ward, president of Ward School Bus Manufacturing, Inc., — one of the largest school bus producers in this country — recently told the House Committee on Interstate and Foreign Commerce Subcommittee on Commerce and Finance that technology to increase school bus crashworthiness is "readily available." It is "certainly high time for DOT to take action in this area," he told the subcommittee, which recently held hearings on legislation that would require DOT to set certain school bus loss reduction standards. Ward claimed that the "highly competitive" nature of his industry inhibits individual manufacturers from adding loss reduction features to school buses unless all manufacturers are required by federal standards to make the same improvements. Ward's company makes what it calls an "S Model" safety bus with padded seat backs, padded stanchions and extra sheet metal rivets. That bus sells for about 10 per cent more than other buses.

Ward pointed out that the National Transportation Safety Board has repeatedly called for improved school bus structures. In one of its four reports on school bus crashes the Board said that school buses are assembled in such a manner that they can do little more than "keep out weather or hold insulation in place." In a crash, the Board said, children are confronted with hostile sheet metal that resembles a "cookie cutter." (See *Status Report*, Vol. 5, No. 15, Sept. 1, 1970.)

The bill being considered by the subcommittee (HR 4187) would amend the National Traffic and Motor Vehicle Safety Act of 1966 to require, among other things, that DOT issue standards on school bus emergency exits, interior protection for occupants, floor strength, seating systems, crashworthiness of body and frame (including protection against roll-over hazard), vehicle operating systems, windows and windshields and fuel systems. Similar legislation is also pending in the Senate. However, Senate hearings are not scheduled.

In the area of school bus loss reduction, NHTSA has proposed a standard aimed at improving seat design. In May, 1972, it issued a rule for emergency exits and windows. The agency also has a standard that requires states to adopt regulations on pupil transportation as part of their highway loss reduction programs.

During recent hearings on the House legislation, NHTSA Acting Administrator James E. Wilson said he would agree with Subcommittee Chairman John E. Moss (D-Cal.) that, at present, a school bus is "a pretty raw piece of equipment that has changed little and offers little prospect of minimizing injury should an accident occur."

However, in prepared testimony Wilson told the subcommittee that the legislation being considered by the Congress is "undesirable." NHTSA already has authority to set standards for school buses, he said.

Rep. Les Aspin (D-Wisc.) told the subcommittee that the legislation, which he introduced and which is being co-sponsored by 66 other members of the House, is necessary "because the Department of Transportation has, in fact, not proceeded with the authority that it already has What this legislation would do is to make it mandatory that DOT issue certain school bus standards."

In his testimony Wilson claimed that approximately 5,000 children are injured annually in school bus crashes. "We estimate that about 90 children lose their lives in school bus accidents annually. Sixty of

the children, or 66 per cent of the total, are pedestrians at the time they are killed. Thirty are struck by the school bus itself, while the other 30 are struck by another vehicle. The remaining 30 children are killed while riding in the school buses." These data, he claimed, point to the need to "improve state programs for transporting school children."

Dr. Howard C. Mofenson, chairman of the American Academy of Pediatrics' Accident Prevention Committee has warned in a letter to NHTSA "that there is a *gross unreporting* (emphasis in original) of school bus accidents." He said that the New Jersey chapter of the American Academy of Pediatrics "has documented more bus injuries in *one* hospital emergency room than were reported in the entire state in 1971."

Recalls, Si; Puerto Rico, No

¿En qué fecha le avisó la compañía del defecto?

If you had difficulty understanding that question, you can imagine the problem confronting the Spanish-speaking residents of Puerto Rico receiving automobile recall notification letters in English. (The question translates: "On what date did the company advise you of the defect?")

The lack of proper notification was just one of the abuses found by a University of Puerto Rico survey in reporting that the U.S. citizens of the Caribbean island – suffering one of the highest fatality rates in the nation – are being denied effective protection of federal auto-safety legislation. Puerto Rico is specifically included in the 1966 National Traffic and Motor Vehicle Safety Act, which established recall notification procedures.

The survey conducted by the university's Consumer Research Center, described "wholesale violations" of the law by manufacturers and "little interest in motor vehicle recalls" by dealers.

The report listed a variety of obstacles – including lack of notification, notification in English, and unavailability of replacement parts – discouraging recalls of an estimated 50,000 potentially defective vehicles in Puerto Rico. Because of the "hostile attitude of automobile executives," the surveyors had difficulty making even a preliminary estimate of the extent of recalls, they said.

The study said the Commonwealth is faced with the peculiar problem of sub-dealers, who purchase cars on the mainland or in San Juan, for resale to individuals on the island, accounting for fifty per cent of total retail sales of new motor vehicles.

"General Motors and Ford openly admit that they are continually violating the National Traffic and Motor Vehicle Safety Act," the 54-page study said, "by carrying the names and addresses of sub-dealers on their list of first purchasers of vehicles."

The report noted that an earlier attempt to implement the law requiring windshield posting of price and factory information "was universally ignored by motor vehicle dealers."

The Center for Auto Safety in Washington, D.C., in forwarding a copy of the report to Transportation Secretary Claude S. Brinegar, backed the study's call for action to ensure compliance with the act in Puerto Rico. The Center cooperated in preparing the report.

Ford Predicts Small Car Boom

Henry Ford II has predicted that by 1977-78 "compact" cars will represent 50 per cent of the new car market. "As far as Ford Motor Co. is concerned, and its share of the market, we will be prepared to at least supply 50 per cent of our total production in that size car," he said. Ford's prognostication was made during a recent NBC Meet the Press interview.

In 1971, the Insurance Institute for Highway Safety conducted medium speed head-on crash tests that illustrate the hazards to small car occupants in crashes with larger cars.

The narrated color film of these tests is available on loan for group and individual showings by writing to "SCAC", Harvest A-V, Inc., 309 Fifth Ave., New York, N.Y. 10016.

Gelles Joins IIHS

I. Lee Gelles has joined the research staff of the Insurance Institute for Highway Safety. A physicist, formerly employed by Kennecott Copper Corp., he has conducted basic and applied research in metals and alloys including methods of structural defect detection.

Gelles holds a B.A. and M.A. in physics from Temple University.

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STATUS REPORT

Ralph W. Hoar, Jr., Editor

INSURANCE INSTITUTE for HIGHWAY SAFETY
WATERGATE SIX HUNDRED • WASHINGTON, D.C. 20037
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