

GM Shifts Air Bag Policy

General Motors wants the U.S. Department of Transportation to delay “indefinitely” its standard to require passive restraint protection in 1976-model cars, so that GM first can try out a number of “diverse” protection systems – including passive air bags and non-passive safety belts – in the marketplace.

One of the “diverse” systems is the ignition interlock belt – the system that, in December, GM urged DOT to avoid because it would “result in inconvenience and aggravation to the public and in some situations may even result in a potential safety hazard.” Now, the auto maker is describing the interlock belt as “a very attractive option” to the air bag.

In a letter to Transportation Secretary Claude S. Brinegar, and in a series of recently developed papers, the auto company’s position toward the government’s passive restraint rule (FMVSS No. 208) emerges as substantially different than in the past. For instance, in June, 1970, GM publicly committed itself to eventual installation of air bags “on all lines as standard equipment in all passenger cars and light trucks . . .” GM has been the only major auto maker that has not contested the government’s passive restraint rule in court.

Now, it has told DOT that it wants the passive restraint rule to be sidetracked “indefinitely – or at least until a program that would accommodate an appropriate phase-in can be established.” In the letter to Brinegar, GM President Edward Cole defined the “all-important” phase-in period as one that would allow it to “determine the best system or combination of systems to be offered as an alternate to the combined lap-shoulder belt with a starter interlock; it may be the air cushion or a combination of air cushion and lap belt.”

GM justifies its new position with a recent paper entitled, *Restraint System Effectiveness: A*

Study of Fatal Accidents, written by two of its employees, R. A. Wilson and C. M. Savage. The paper, which purports to show that lap-shoulder belt systems and air bag-lap belt systems are more effective in reducing fatal injuries in crashes than are air bags, is based on retrospective analyses of 706 crash fatality cases. Each case was evaluated by a GM-selected “jury” of four engineers who “rated” the possible survival chances of the fatalities if they had been using any one of four protection combinations: air bags only, lap belt only, lap-shoulder belt, and air bag-shoulder belt.

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The GM paper is built around the premise that "this collection of 706 fatalities in late model passenger vehicles represents a valid sample that can be used to extrapolate results." However, about half the cases were drawn from the files of DOT-sponsored multidisciplinary accident investigation (MDAI) teams and the other half from files of GM or its subsidiary, Motors Insurance Co.; a DOT staff member responsible for administering the MDAI program warned this week that the cases selected for investigation by the teams "do not have statistical validity" and should not be treated as representative of typical, real-world fatal crashes.

The paper also assumes use in all cases of safety belts. In fact, no more than 20 per cent of urban drivers and an even lower share of non-urban drivers actually are using belts.

The new GM position was amplified in yet another recent paper from the company — a policy speech delivered by David E. Martin, GM's director of automotive safety engineering, during a company-sponsored "environmental activities week" late last month. In the little publicized speech, Martin said that "peoples' attitudes, fears, and incomes [his emphasis]" should determine in the marketplace which restraint systems they receive in their new cars. There is "no need to narrow customer choice" by requiring air bag protection in all cars, he said.

CHOICE OF RESTRAINT URGED

Martin admitted that "most motorists choose to ignore their lap and shoulder belts," so there has been a "strong desire on the part of safety authorities to take this choice out of their hands through passive restraints." But, he claimed, "because the motorist has not been prudent in the matter of a simple choice in the past does not imply that he should be deprived of future choices."

One of those choices, Martin said, should be belts with interlock systems, such as those now required for 1974-model cars. In what represents a drastic change in his company's position, Martin called belts with interlocks "a very attractive option" which "allows the prudent driver to provide himself with maximum protection at a relatively low price," and also won't "alienate motorists who habitually have been wearing belts."

On December 10 of last year, GM petitioned DOT to drop any requirement that would put belt interlock systems on new cars. "We believe that use of the starter interlock should be avoided because of the high risk that this feature will create a customer reaction against the use of belt restraints," it said in the petition. It also warned DOT that the interlock would have a failure level sufficiently high to "result in inconvenience and aggravation to the public and in some situations may even result in a potential safety hazard. These problems may outweigh any possible additional benefits provided by the system."

Coincident with unveiling its changed position toward across-the-board provision of air bags, GM said it is delaying its planned large-scale installation of the units for field-test purposes. Blaming its action on DOT tardiness in drawing up specifications for dummies used to test restraint systems — specifications required by a court decision last year (see *Status Report*, Vol. 7, No. 23, Dec. 18, 1972) — GM said that it can no longer promise to provide 100,000 air bags as options in 1974-model cars and one million units in 1975-model cars.

Gilman Joins IIHS

Cindy Gilman has joined the Communications staff of the Insurance Institute for Highway Safety as an investigative reporter. She was formerly with the National Highway Traffic Safety Administration's Office of Program Planning, where she assisted in research and preparation of staff analyses. Gilman is a graduate of the University of California, Berkeley.

Reclining Babies Not Protected By Safety Standard

Although few parents probably realize it, the National Highway Traffic Safety Administration's rule on child car seats offers no protection to infants who are too young to sit erect. And, according to Robert L. Carter, NHTSA's associate administrator for motor vehicle programs, devices designed to carry such infants in cars – so-called “car beds” or “infant carriers” – will not come under the agency's child seating standard “in the near future.”

In an April, 1973, letter to a concerned consumer, Carter stated that child seating systems covered by the standard “are recommended for use by children from approximately eight to nine months to three to four years of age.” He noted that although NHTSA “is presently developing a proposed amendment to the existing standard which will require dynamic tests of all restraints and will regulate infant restraints which are not presently covered by Standard No. 213 [Child Seating Systems] . . . it is not anticipated that this amendment will become effective in the near future.”

NHTSA's child restraint standard was issued March 30, 1970. It became effective April 1, 1971, for all child car seats manufactured after that date which both seat *and* restrain a child in a motor vehicle. Effective Nov. 1, 1973, any device designed to seat a child in a motor vehicle must comply with the requirements of the standard, whether or not its manufacturer says it is intended to restrain the child.

This amendment will eliminate a present loophole in the standard by preventing the manufacture of devices which are advertised for transporting children in motor vehicles but make no provision for protecting them in crashes.

But even though that loophole is being eliminated, infants who must be transported in recumbent or semi-recumbent positions are still without guaranteed protection.

In a December, 1971, publication entitled, *What to Buy in Child Restraint Systems*, NHTSA notes that the “infant up to nine months is particularly vulnerable to sudden stops or highway collisions. In the sudden, tremendous forces of a highway crash, a parent's arms are not strong enough to hold the child, even at low speed.” Yet, the agency's standard continues to specifically exclude devices for use by infants who must be carried in “recumbent” and “semi-recumbent” positions.

One cause for delay in amending NHTSA's child seating standard to include “infant carriers” and “car beds” has been what agency officials characterize as difficulty in developing a dynamic test procedure for compliance testing. At present, static tests are required. According to one agency official, research has been completed on dynamic test procedures for child seating systems.

Unlike automobiles, child restraint devices require relatively short “lead time” notice for their manufacturers to make design changes in response to federal performance standards or customer demand.

Child seat manufacturers are already complaining about increased costs that they feel will come with more federally-required protection. According to a memorandum written by NHTSA attorney Michael P. Peskoe, the Juvenile Products Manufacturers' Association, in a meeting with safety agency officials, has claimed “that less children now than in previous years are using child seats.” JPMA “claimed that child seats are now too expensive to be sold in many outlets . . . in which they were formerly sold,” Peskoe said.

The NHTSA publication, *What to Buy in Child Restraint Systems*, can be purchased for 20 cents from the U.S. Government Printing Office, Washington, D.C. 20402.

Another brochure on child seating systems published by Physicians for Automotive Safety, entitled *Stop Risking Your Child's Life*, can be obtained for 25 cents and an unstamped, self-addressed envelope from Physicians for Automotive Safety, 50 Union Avenue, Irvington, N.J. 07111.

NHTSA Lifts Mini-Car Safety Rule Exemption

The National Highway Traffic Safety Administration has discontinued its blanket safety rule exemption for lightweight motor vehicles. All motor vehicles made after the first of next year will be subject to requirements of federal motor vehicle safety standards. (See *Status Report*, Vol. 7, No. 16, Sept. 5, 1972.)

Although the across-the-board exemption for cars weighing 1,000 pounds or less has been lifted, agency officials say that NHTSA will consider exemptions from individual standards for cars in that weight class.

In August, 1972, when it proposed lifting the exemption, the agency stated that vehicles weighing less than 1,000 pounds have "inherent disadvantages" in meeting some standards such as those requiring "structural strength or considerable crush distance." However, it said, "many other important standards . . . such as those on lighting, braking and (windshield) glazing should be attainable by lightweight vehicles virtually as easily as by heavier ones." It is therefore "in the public interest" to "consider the needs and problems of lightweight vehicles on a standard-by-standard basis" as is now done for heavier vehicles.

According to an agency source, compliance with safety standards "should not prohibit the development of an urban vehicle" where considerations of economy — such as fuel consumption — or of population density "dictate a need." There are areas, he said, where the agency "may have to give" so that the development of urban cars will not be impeded.

The official told *Status Report* that this is an "opportune time to remove the exemption," since there are no motor vehicles "in production in the U.S. or being imported into the country at this time that weigh less than 1,000 pounds." Although domestic production of cars in this weight class is now at a standstill, there are "indicators" that many small cars "will be coming into production in the 1980's," he said.

NHTSA originally exempted small vehicles from compliance when federal safety standards were first issued in 1967. In February, 1970, the agency proposed removal of the general exemption. However, two years later, the agency announced that it had decided not to remove the exemption "due to the extremely small number of vehicles that would be affected by the proposed change." The decision now to remove the exemption was "precipitated" by a petition filed by the Center for Auto Safety, the agency says. In that petition, the Center called for "immediate action," stating that "a person should not have to sacrifice safety to obtain the size and type of vehicle which meets his or her needs." (See *Status Report*, Vol. 7, No. 10, May 22, 1972.)

In another recent proposal, the agency has moved to head off any attempts that manufacturers might make to classify three-wheeled vehicles as motorcycles, thereby avoiding more comprehensive passenger car safety standards. Under NHTSA's present definition, any powered three-wheeled vehicle is considered a motorcycle — even if it has an enclosed passenger compartment and all the other usual characteristics of a passenger car. The agency is seeking to limit the motorcycle classification to two-wheeled vehicles and three-wheeled vehicles "without a full or partial passenger enclosure."

State-By-State Survey Shows Hazards Abound

A federally requested survey by states of roadside hazards has revealed that some 15,000 to 20,000 "gore areas" need some form of remedial action, according to the Federal Highway Administration.

Energy absorbing crash cushions or impact attenuators would be required in more than a thousand of those locations that cannot be modified by other means, the agency said.

The national figure was projected from a spot check of states responding to a U.S. Department of Transportation memorandum issued by FHWA (IM 40-5-72, Nov. 8, 1972) requesting states to inventory within six months and correct within two years the hazards in "gore areas" — locations where exit ramps leave main roadways. (See *Status Report*, Vol. 8, No. 2, Jan. 15, 1973.)

The FHWA believes that the inventory is complete in about 80 per cent of the states, although not all the results have been forwarded to Washington.

Each state's list, identifying specific hazardous "gore area" sites, will be forwarded to FHWA division offices when the states request federal funds for hazard correction projects, according to an FHWA official. That "should be relatively soon," he said. Each state's department of highways should already have such lists on hand. "Lists of high accident locations are usually available to the public," he said.

"Some states incorporated the survey into their ongoing safety programs. Others made a new survey," Jim Hatton, a member of the FHWA staff told *Status Report*. "Many states indicated no problem in meeting the goal of treatment within two years," he said.

The survey covers only Interstate roadways and other federal-aid highways, and does not include hazards on all other roads. Among the states reporting:

- New York located 2,500 sites in "gore areas" that would require removal, relocation, remodeling or shielding of hazards.
- California estimated an outlay of \$2,100,000 for crash cushions and \$18,000,000 to remove and relocate signposts over a four year period.
- Illinois claimed only 125 locations where crash cushions may be required. The number of other hazards that could be corrected through the use of modifications, such as break-away signposts, was not reported.
- Tennessee reported 343 "gore area" hazards with 19 requiring crash cushions, plus an additional 208 possible locations for crash cushions to shield roadside hazards located elsewhere.

The survey was aimed at "gore areas," although the FHWA memorandum recommended use of the energy-absorbing devices for roadside boobytraps in other locations, such as unshielded bridge piers, temporary barricades, and other fixed objects.

The determination of the degree of hazard and the need for crash cushioning or other modification was made by each state — in a few instances, with FHWA team assistance.

The memorandum, which called for inclusion of crash-cushioning devices in new highway projects, asked for "the early treatment on a hazard priority basis" of existing highways.

NHTSA Urged To Drop Belt Warnings On Buses

The National Transportation Safety Board has urged the National Highway Traffic Safety Administration to abandon its plan to let bus makers install devices that would warn the driver when a passenger has not fastened his seat belt. The board told NHTSA that the "seat belt 'warning' or signaling system has no practical merit."

NTSB, the federal government's transportation safety watchdog, commenting on the safety administration's recent proposal to improve bus seats, said that the agency should forget about the warning system and require improved padding and seat strength as well as "seat belt anchorages at each seat location" for school buses. NHTSA's recent proposal does not call for seat belt anchorages. (See *Status Report*, Vol. 8, No. 5, Feb. 26, 1973.) The board said that anchorages "would permit school bus users to install seat belts to protect students in overturns."

The board also suggested that NHTSA divide rule making for buses into three distinct categories. Those groupings should be determined by the "type of service, structure and configuration, or passenger needs," it said. Under current lumping of buses in one category, "Little consideration is given to differences in operating conditions and accident experience among interstate (long-haul) buses, municipal (transit) buses, and school buses.

"This problem probably arises from the vehicle-type classification system used for Federal Motor Vehicle Safety Standards, which does not rigorously characterize vehicles in relation to their intended utility. Different utility patterns produce different hazards, and different motivations for safety standards," the board told NHTSA.

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Ralph W. Hoar, Jr., Editor

INSURANCE INSTITUTE for HIGHWAY SAFETY
WATERGATE SIX HUNDRED • WASHINGTON, D.C. 20037
(AREA CODE 202-333-0770)