

NTSB, NHTSA Differ On Urgency Of Bus Hazards

The federal government has been told by the National Transportation Safety Board, its transport safety monitoring arm, to take "immediate corrective action" to require strengthening of school bus structures against the kind of "gross disintegration" that contributed to death and injury in a Congers, N.Y. school bus crash earlier this year.

But an official of the National Highway Traffic Safety Administration—the federal agency empowered to take such action—says that a standard requiring stronger school bus structures is "possibly two years away."

In a preliminary report on the Congers crash, in which five occupants were killed and 45 injured, the safety board said that "widespread failures of the school bus body at the joints" led to the "gross disintegration" of the passenger compartment in the crash. "Approximately the rear one-third of the bus was separated" from the rest of the bus, it said.

As the board described the crash—between the school bus and a train—"A large portion of the roof (of the bus) was separated from the remainder of the body, the side walls on the right side were separated from the floor and the floor sections were separated from each other and from the chassis frame . . . window columns failed . . . and there were widespread failures of seats at their fastenings to the floor." The

board called for "immediate corrective action" by the National Highway Traffic Safety Administration. The "very high value that society places upon the protection of children riding in school buses establishes the need for improvement in structural design," the board said.

The board stressed that, "The adoption of a standard (by NHTSA) to control the assembly of structural joints in school buses should not be regarded as a novel initiative to reduce school bus fatalities, but as correction of a long-standing failure to employ normal engineering practices in school bus construction." It said that many existing school buses do not even meet rivet-spacing recommendations of a Society of Automotive Engineers standard issued in June, 1961.

However, the board reported "at least two" bus makers—using guidelines established

Inside

- NHTSA Ignores Hazard of Unplanned Gear Changes . . . page 2
- Canada Bans 26 Child Seat Models, Some Still Sold In U.S. . . . page 3
- Congress Approves NHTSA's Highway Safety Program Budget — . . . page 4
- —But Sits On Vehicle Safety Money . . . page 5
- Toms Says He 'Could Have Predicted' Buzzer-Light Device Failure . . . page 6

by the Vehicle Equipment Safety Commission—have already built prototype buses “constructed of much larger steel sheets to reduce the number of joints. . . . In addition, many more rivets are used to join sheets and structural members.” One of the manufacturers told the safety board that the increase in the sale price of a bus having “more complete assembly of structural joints was only approximately five per cent of the total cost,” the board said.

Asked about his agency’s reaction to the board’s call for immediate action on school bus structural strength, an NHTSA official told *Status Report* that it would be “possibly two years” before NHTSA issues a corrective standard. It is giving priority, he suggested, to the area of passenger restraints in school buses, which it feels is “the biggest single” factor in occupant protection. “Once we get that out of the way we can go after the other things,” he said.

NHTSA will soon require school bus manufacturers to build buses equipped with high, padded seat backs, according to the official. A public proposal of the requirement is “imminent,” he said. NHTSA hopes that the improved seat backs “will negate” the need for seat belts in school buses, he added.

Earlier this year after investigating a Colorado school bus crash, a team of NHTSA investigators said that while seat belts “would have protected the passengers from the adverse effects of being ejected,” the belts would have tended to keep passengers erect in their seats and “would have placed the passengers’ heads and necks above the low seat backs and in direct contact with the roof of the bus” that collapsed in the crash.

The team said that seat belts should be considered only as part of a “total design concept” that would include “a more rigid roof-side structure . . . high seat backs with energy dissipation surface characteristics . . . seat anchorages sufficient to maintain seat integrity in frontal and rear collisions, as well as side collisions and rollover accidents . . . (and) a contoured seat area design which tends to confine the passenger in his general seat area in the event of a crash.” (See *Status Report*, Vol. 7, No. 10, May 22, 1972.)

Unplanned Gear Shift Allowed In Bumper Test

The National Highway Traffic Safety Administration apparently thinks there’s no safety related hazard involved when a car inadvertently jumps into gear after a minor impact.

NHTSA revealed its position in an “interpretation” of the agency’s exterior protection standard (FMVSS 215). The standard requires—beginning with 1973 models—that cars withstand front impacts of five miles per hour and rear impacts of 2.5 miles per hour into a barrier without damage to specified safety related items. Beginning with 1974 models, impact speeds are set at five miles per hour front and rear. Five mile per hour pendulum impacts are added for 1974 models.

Nissan Motor Co., Ltd., a Japanese auto maker, had sought clarification of the standard. A Nissan official said in a letter to the safety agency that “when we conduct a pendulum test, the shift lever (in automatic transmission) might move from ‘neutral’ to ‘drive’.” He asked if that would violate the agency’s requirement that, “The vehicle propulsion, suspension, steering and brake systems shall remain in adjustment and shall operate in the normal manner” after a five mile per hour pendulum impact.

NHTSA’s assistant chief counsel Richard Dyson responded that, “The propulsion system is not considered to be out of adjustment if the shift lever moves from ‘neutral’ to ‘drive’ during a test impact, so long as the movement does not impair the subsequent operation of the transmission or other parts of the propulsion system.”

Dyson told *Status Report* that “this is the only reasonable interpretation” of the agency’s standard. Shifting into gear during the test involves “no operational loss” to safety related items, he said.

During low speed crash tests conducted by the Insurance Institute for Highway Safety, a 1970 Ford Galaxie 500 dropped from neutral into reverse after a 15 mile per hour head-on barrier crash. Film of this, and 11 other possible safety defects, was supplied to NHTSA in June, 1970. The film was recently used in a successful law suit against Ford Motor Co. The suit grew out of a crash in which a 1968 Ford Galaxie shifted into reverse following an initial frontal impact. The driver was severely injured in the crash. (See *Status Report*, Vol. 7, No. 16, Sept. 5, 1972.)

The agency "didn't consider" such a hazard when it gave the Japanese auto maker its interpretation of the standard, Dyson said. "Perhaps we ought to have a separate rule" that would prevent cars from inadvertently shifting gears in low speed impacts, he said.

Canada Bans 26 Child Seat Models

The Canadian government has banned the advertising, sale and importation of 26 models of child seats that fail to meet its new safety regulations. Some of the 26 models banned in Canada are being sold in this country and are certified as meeting the U.S. safety standard governing child seats.

In banning substandard seats, Canada's Department of Consumer and Corporate Affairs acted under that country's Hazardous Products Act. The child seating regulations issued under the act went into effect in June of this year. The Canadian agency is empowered by the act to seize any hazardous product—including substandard child seats. It may also ban products manufactured before the effective date of the child seat regulations promulgated under the Canadian act. The act provides a penalty of up to two years imprisonment for anyone who advertises, sells or imports a substandard seat.

(The U.S. National Highway Traffic Safety Administration does not have the power to regulate child seats manufactured before the effective date of its safety standard. It cannot seize non-complying seats. NHTSA has the power to seek civil but not criminal penalties against violators of its standard.)

The Canadian regulations are based on the U.S. child seating safety standard (FMVSS 213). However, the Canadian regulations include head restraint and impact protection requirements which have been proposed but not yet adopted as part of the U.S. standard.

The Canadian Department of Consumer and Corporate Affairs listed the following 26 seats that are being removed from sale in that country: Britax "Star Rider"; Dorel models 530, 550, 554, 554-70, 555, 556, "Universal," and "Sit'N'Snooze"; Firestone (Hamill) "Protecta Tot"; International model 6000 (Teddy Tot); Kantwet model 582; K.L. Jeenay "Child Safety Seat"; Pride-Trimble models 500 and 851; Peterson models 67 and 61; "Jiffy Safety Harness for Children" model 1482; Frank F. Taylor Co. "Taylor Tot"; Wonda Chair 500; World Famous Driver/Walker Baby Carrier model 210; Puritan (Ceva) "Tot Toter"; Toni "Safety Baby Chair"; Combination "3 in 1" car seat model 1095, Sheres Co. Ltd.; Baby Relax "7 in 1 All Purpose Baby Chair" and "Sani Baby Carry All" model 4823.

Physicians Offer New Child Seat Buying Guide

Physicians for Automotive Safety has published a revised version of its brochure on child seats. (See *Status Report*, Vol. 6, No. 17.) Copies of "Stop Risking Your Child's Life!" can be obtained by mailing 25 cents and a self-addressed return envelope to: Physicians for Automotive Safety, 500 Union Avenue, Irvington, N.J., 07111.

Congress Cuts Highway Safety Program Budget

The Congress has trimmed by \$8.7 million the Department of Transportation's budget request for state and local-aid programs funded under the Highway Safety Act of 1966. The congressional action establishes a funding level for fiscal year 1973 of \$129.2 million—\$10.6 million above last year's level.

In passing DOT's appropriations act, the Congress cut \$3.7 million from the National Highway Traffic Safety Administration's request for research and development funds. These funds would have increased support for such programs as the agency's Alcohol Safety Action Program (ASAP), carried out under section 403 of the 1966 act. The request for funds to support state and community programs implementing the 18 highway safety standards under section 402 of the 1966 act was cut by \$5 million (see chart).

Specific funding levels established by the Congress for NHTSA's programs include:

- \$27 million for ASAP, which is \$1.3 million less than requested but \$1 million more than was appropriated for fiscal year 1972.
- \$1 million for NHTSA's funding of Selective Traffic Enforcement Programs (STEP). That amount is \$2 million less than requested and the same as in fiscal year 1972.

The appropriations act also establishes 10 new NHTSA staff positions, not requested by DOT, which are designated for work on school bus safety.

The House Appropriations Committee had sought unsuccessfully to cut \$5.3 million from NHTSA's research and development request. In recommending reduced funding for ASAP and STEP programs, the committee cited its desire to curb the "proliferation of pilot projects" in favor of a "national enforcement effort"—using data which it said NHTSA already has—"to provide significant nationwide fatality and injury reductions."

In millions, the following chart compares fiscal year 1972 and fiscal year 1973 budget requests with the 1973 level of spending approved by the Congress.

	FY 1972 Budget Request	FY 1973 Budget Request	FY 1973 Approved By Congress
Research and Development (Sec. 403)	38.6	47.9	44.2
State and Community (Sec. 402):			
NHTSA (13 standards)	67.1	76.7	72.2*
FHWA (3 standards)	<u>12.9</u>	<u>13.3</u>	<u>12.8</u>
	118.6	137.9	129.2

*Includes funds to administer newly effective standards on crash investigations and pupil transportation.

NHTSA Motor Vehicle Funds Held Up In Congress

Although three months of fiscal year 1973 have already passed, the Congress has not yet authorized or appropriated any money for the National Highway Traffic Safety Administration's motor vehicle safety programs. Until the Congress acts, NHTSA is required to maintain its spending for programs funded under the National Traffic and Motor Vehicle Safety Act of 1966 at or below last year's level.

In January, the Department of Transportation asked the Congress for \$36.9 million to support NHTSA's motor vehicle safety programs. It later increased the request to \$37.5 million in order to cover employee pay raises. The request represents a \$6.8 million increase over last year's spending level.

Earlier this year, the House and Senate Appropriations Committees deferred action on the motor vehicle request because neither the House nor Senate had authorized further expenditures under the 1966 act. In August, the House passed an authorization that would give NHTSA the \$37.5 million it had requested. In July, the Senate Commerce Committee reported out a bill authorizing a funding level of \$51.7 million—\$14.2 million more than NHTSA had asked for.

The bill is expected to get full Senate consideration early this month.

In its authorization bill, the Senate Committee has recommended, among other things, that DOT's request of \$37.5 million be increased by:

- \$1 million for occupant packaging research. The committee said that these funds should be used for additional research in "new development of air bags and other passive restraint systems (for example, passive belt systems)." The committee also recommended that the size of NHTSA's air bag test fleet be increased from the present 125 vehicles to 2,000 vehicles. In its report on the bill, the committee emphasized that the "increases for crash survivability research represent the committee's commitment to the installation of a passive restraint system in all new vehicles."

- \$1.5 million for vehicle structures analysis in order to increase research in the areas of "pedestrian safety and school bus crashworthiness."

- \$500,000 for a defects investigation "contingency fund." The fund would be used "to expedite a defects investigation which may present a substantial threat to the motoring public" or when the demands on NHTSA's defects investigation staff "are too strenuous to effectuate all of the pending investigations."

- \$2.5 million for the vehicle-in-use program so that the "six year old congressional mandate" for vehicle-in-use standards is "implemented as expeditiously as possible."

- \$1.5 million for establishing additional multidisciplinary crash investigation teams.

- \$500,000 for "cost and leadtime" studies to provide an estimate of cost and to assess "the reasonableness, practicability and appropriateness" of standards before they are issued.

According to a Commerce committee staff member, the committee will recommend during Senate floor debate that its bill be amended to give NHTSA authority to allow exemptions from motor vehicle safety standards under certain circumstances. Under the amendment, NHTSA would be allowed to grant a manufacturer an exemption of up to two years for a specified number of vehicles. The exemption could be given if it would aid the development of "new motor vehicle safety features" or a "low-emission motor vehicle" or permit the sale of a vehicle "whose overall level of safety is equivalent to or exceeds the overall level of safety of non-exempt motor vehicles." NHTSA could also give an exemption—for up to three years—to a manufacturer of 10,000 or less vehicles if compliance would cause "substandard economic hardship" and the manufacturer had tried "in good faith" to comply with the standard.

Buzzer-Light Findings 'No Surprise' To Toms

News that safety belt buzzer-light warning devices are ineffective in getting car owners to buckle up came as "no surprise" to Douglas Toms who, as head of the National Highway Traffic Safety Administration, mandated their installation.

Following the release of data by the Insurance Institute for Highway Safety showing that the warning devices have made no significant change in the number of people who wear safety belts, Toms told the National Motor Vehicle Safety Advisory Council that "the finding is absolutely no surprise to us. I think we could have predicted it just as well. . . . The thorough study shows that the application (of) buzzers and warning lights have not increased seat belt usage one bit." (See *Status Report*, Vol. 7, No. 17, Sept. 18, 1972.)

Toms told the council, "There's no question that the behavioral modes of the motoring public are more deeply ingrained than a buzzer and a warning light. All that a buzzer and a warning light provides is a moment's harassment and a need by the consumer to find out how to avoid the harassment and he quickly found out that by tying the belt in a knot, and forgetting about it" he could defeat the warning device, "so that's what he did."

Warning Device 'Waste' Estimated

The following quotes are taken from news accounts of the Institute's findings that the federally mandated belt buzzer-light warning system does not significantly increase belt use:

"... If the device is worth \$10 a car, and sales this year are close to 11 million units, this would mean a waste of \$110 million." Detroit News

"... The Bureau of Labor Statistics reported earlier this year that the new safety belt system raised the retail price of a car \$20.25." Washington Post

Reporters calling Ford Motor Co. to ask its reaction to the findings were supplied a prepared statement saying that the Institute's findings "certainly don't jibe with the findings of a study we commissioned an independent research firm to do on the subject."

Ford's prepared reaction, labeled "Q & A on Haddon Seat-Belt Study," said that in a study "made in June" the auto maker found that, "After three months of ownership, observed driver lap-belt usage in reminder-equipped cars was 42 per cent, compared to 29 per cent usage in pre-reminder system cars." (The Institute found the use rate in cars equipped with the warning device to be 18 per cent. The use rate in cars without the device was found to be 16 per cent. Such a small difference could easily occur because of sampling fluctuations, even though there is no actual difference in the belt use rate. See *Status Report*, Vol. 7, No. 17, Sept. 18, 1972.)

An official at the safety administration told *Status Report* that the new Ford-sponsored study was not made available to the agency until September 27—three months after Ford said the study was completed. The information that Ford has given NHTSA "doesn't give a very complete" explanation of the methods used to conduct the study, the official said.

Ford had conducted an earlier study of the effectiveness of the warning devices and claimed that belt use rates were as high as 80 per cent in Ford cars equipped with the warning devices. The methods used in that study were criticized as "inept science" in the Institute's recent report.

Ford is fighting NHTSA's passive restraint standard in court. The auto maker says in its court fight that it has "long advocated" the use of devices such as the buzzer-light warning device to increase belt use.

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the highway
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STATUS REPORT

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