

Auto Makers, NTSB Differ On Fuel System Plan

Auto makers have agreed in principle to proposed federal standards for fuel system integrity in rear-end collisions. But the National Transportation Safety Board — the government's independent safety watchdog — wants the test requirements strengthened to include rear-corner impacts.

In comments to the National Highway Traffic Safety Administration, the Big Three manufacturers and their industry association raised no substantive objections to meeting a proposed 30 mile per hour moving-barrier rear-end crash test.

But, they objected vigorously to the proposed standard's requirements for other simulated real world test conditions, such as a dynamic rollover test, an operating engine during testing, and use of gasoline instead of a test liquid to measure fluid loss.

The National Transportation Safety Board commended NHTSA for its proposal, but recommended the additional tests of a 30 mile per hour impact at a 30 degree angle from each side of the test vehicle, with the vehicle in a panic-braking, nose-down, rear-up attitude. "These two tests would permit evaluation of the integrity of fender-mounted fuel tanks and fill pipes," the NTSB said.

The NTSB also recommended that all front and rear-end testing be done with the test vehicle in such a panic-braking attitude. It said the flat-faced moving barrier should be considered an interim standard only, pending the development of a future standard that would provide for mutual interaction between bumpers of different types of vehicles.

In raising minor objections to the proposed moving-barrier rear-end crash test, now planned to be effective for 1977 model cars, the Motor Vehicle Manufacturers Association suggested a change concerning the type of test dummies to be used. General Motors requested that the parking brake be disengaged. Ford agreed, additionally recommending minor changes in the barrier configuration and elimination of vehicles

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other than passenger cars from the test. Chrysler repeated an earlier recommendation that weight loads in the trunk be unsecured.

The only domestic maker that proposed less than a 30 mile per hour rear impact test was American Motors, which suggested a 20 mile per hour movable barrier impacting the rear or that side of the vehicle closest to the fuel tank.

The manufacturers' strongest objections were filed in response to the proposal for a dynamic rollover test at 30 miles per hour, beginning with 1978 model cars. The Motor Vehicle Manufacturers Association said:

"A dynamic rollover is not capable of close control or analysis; thus, neither the test nor its results are repeatable. The time interval during a rollover is short – a few seconds. The allowable fluid loss is extremely small and could be lost over a large unpredictable area. We cannot conceive of any method of measuring this fluid loss in the course of a rollover. Results of the test cannot be observed or recorded with the objective certainty required of tests in safety standards."

The agency's proposal that tests be conducted with the engine idling drew three major complaints from the auto makers:

- It could increase the possibility of fire.
- The engine might not run after impact.
- An engine in use could leak fluids other than gasoline, such as engine oil and transmission fluid.

(Cont'd on page 3)

Fire Hazards Hit In ABC News Special

An hour-long *ABC News Close-Up* on the built-in hazard of fire in American products, among them the automobile, will be seen across the country on stations affiliated with the American Broadcasting Company (ABC) on Monday, Nov. 26, at 8 p.m. Eastern Standard Time (7p.m. Central).

"It will zero in on how the Government and industry have let the public down," according to ABC Science Editor, Jules Bergman. "It's an indictment of how 12,000 people are killed every year in fires.

"We look at unenforced building codes, improper flammability tests of products and inadequate equipment in fire departments," Bergman added. "Federal officials and industry leaders we call to task will have a chance to answer our charges."

The program will include crash tests demonstrating the susceptibility of automobile fuel systems to damage and fire. The tests were conducted by the Insurance Institute for Highway Safety.

The makers recommended the loss measurement be conducted with a fuel substitute, such as Stoddard solvent. The makers also requested clarification of the proposal to insure that no single test vehicle would have to meet more than one of the dynamic tests proposed.

The manufacturers repeated earlier objections to the possible loss of fuel from the carburetor in the static rollover test adopted by the agency. (See *Status Report*, Vol. 8, No. 18, Oct. 5, 1973.)

In other comments to the docket, the Center for Auto Safety asked that the proposed deadlines be made effective one year earlier. Besides asking clarification of sections of the proposals, the Center urged the agency to consider upgrading the test speeds to 35 or 40 miles per hour.

A letter from C. Thomas VanVechten, describing himself as a registered professional civil engineer, stated that the standard should encompass rear corner impacts; and provide that at least one door be operable for escape after all impacts.

(Front-into-rear moderate-speed crash-tests by the Insurance Institute for Highway Safety of six pairs of new cars showed that one or more doors jammed in five of the six struck vehicles. See *Status Report*, Vol. 8, No. 11, May 29, 1973.)

Among European makers responding with comments, Mercedes-Benz said its diesel-powered cars had a much better record in regard to collision-caused fires than gasoline-powered vehicles.

Volvo was in general agreement with the proposed standard, but objected to dynamic rollover and fire hazards posed by fuel use test requirements.

Volkswagen, which must meet the present 30 mile per hour frontal impact with its gasoline tank in the front, objected to additional test requirements.

Ford Assessed Damages In Crash Fire

An Illinois jury has returned a \$678,000 verdict against Ford Motor Co. for improper design of an automobile fuel system.

The award went to the surviving members of a family burned by fire that erupted after their 1966 Ford was struck, and to a bystander who helped pull them to safety.

The crash occurred near Carlyle, Ill., in January, 1971. One child died in the flames. Both parents and three other children survived, all but one child suffering burns. The family's Ford Fairlane was struck in the left rear at an approximate 40-degree angle, by a 1967 Plymouth Fury.

"Five occurrence witnesses testified that there was flame instantly on impact," plaintiff's attorney James H. Cooksey said. "Subsequent to impact, the Ford automobile rotated counter clockwise and came to rest on its right side with all occupants trapped inside."

Attorneys for the plaintiff placed "great emphasis" on the lack of a firewall. An expert witness theorized that the open filler spout had been pushed forward into the trunk, spewing gasoline toward the passengers. The gasoline cap was found fifty feet from the point of impact. (There are still no federal standards to prevent such failures. The existing standard covers only front end impacts. The proposed standards omit any requirement for rear corner impacts. See *Status Report*, Vol. 8, No. 17, Sept. 10, 1973.)

Both Ford and the co-defendant driver of the striking car are seeking a new trial.

Five States Complain Of Safety Requirements

Five states — Louisiana, Missouri, Nebraska, Tennessee and Virginia — have complained about the Department of Transportation's demands that they bring their long-range highway safety plans to an acceptable level. Nineteen other states, Puerto Rico and the District of Columbia have said they will cooperate with DOT. Illinois and Nevada asked for and received extensions in order to implement some of their required programs. DOT allowed these extensions because the states' legislative sessions were not phased to permit the original implementation dates.

DOT had told 45 states, Puerto Rico and the District of Columbia that their long-range highway safety plans were unacceptable. (See *Status Report*, Vol. 8, No. 19, Oct. 17, 1973.) The states were given specific deadlines for action. Under the Highway Safety Act of 1966, DOT can withhold all of a state's highway safety funds and 10 per cent of its highway construction funds if those deadlines are not met.

Following are summaries of the complaints and challenges that the five protesting states sent to DOT as well as the agency's replies.

Louisiana. DOT had told Louisiana to resubmit its entire long-range plan for highway safety activities for fiscal years 1974 through 1977 by Dec. 15, 1973. Louisiana called the government's deadline "unfair" and citing its own current "lack of information and expertise to identify and analyze problems and to evaluate their effectiveness," asked for an extension at least until Dec. 15, 1974. "Louisiana has been placed in the untenable position of having to draft five comprehensive plans in five years," the state complained. In reply, DOT said: "We do not see the requested comprehensive plan re-write as requiring a major effort on the part of your office, recognizing the time under which you are working."

Missouri. Gov. Christopher S. Bond in a letter to NHTSA said: "I concur with those governors who think it neither appropriate, proper, nor politically wise for a governor to issue an ultimatum to the Missouri General Assembly to pass certain laws required by the federal government." DOT did not reply. Missouri had been told to enact legislation to improve emergency medical services, (EMS) driver licensing procedures and blood-alcohol testing measures. The governor reported that the state is now implementing the EMS requirements.

Nebraska. In a letter to DOT Secretary Claude S. Brinegar, Nebraska's Gov. J. J. Exon complained that the highway safety policy being pursued by DOT "does not, in fact, reflect federal-state cooperation, but, rather, a policy of federal dictate." He said he was "astonished" that his state's legislature "was being ordered to pass four legislative items" and that as governor he is "in no position to dictate, and will not (dictate)" to the state legislature. In reply, Brinegar said: "The legislature shares responsibility for the program with the governor." He added, "the failure of the legislature to enact essential legislation represents a decision by the citizens of the state through their elected representatives, not to implement the program and, therefore, to accept reductions in federal funds."

Tennessee. In a letter to Secretary Brinegar, Gov. Winfield Dunn questioned DOT's requiring the state to have a periodic motor vehicle inspection (PMVI) program or an acceptable alternative by June 30, 1975. Gov. Dunn said PMVI legislation had been introduced unsuccessfully in the state in the past and another bill that would require PMVI is pending. He noted that the state legislature has never looked favorably on PMVI and "there is no assurance that they will in the future." In reply, Brinegar said: "Failure to enact such legislation must be viewed as indication that the State prefers to accept reductions in Federal funds rather than to enact the necessary state laws."

Virginia. In a letter to DOT, John T. Hanna, Virginia's highway safety representative, requested that the federal agency withdraw its demand that the state, within a year of the end of the 1975 legislative

session, have a periodic driver re-examination program including knowledge as well as vision testing for all drivers at least once every four years. "We cannot justify the program from a highway safety cost effectiveness standpoint," claimed Hanna.

NHTSA Administrator Dr. James B. Gregory replied: "It would not be in the interest of highway traffic safety to exempt the Commonwealth of Virginia from the requirement to fully implement the periodic driver re-examination element of the standard." Gregory asked for a meeting with Virginia's Gov. Linwood Holton "to discuss highway safety." Gregory added: "Perhaps the subject of driver re-examination could be one of the items discussed."

Auto Makers Seek Safety Standards For MPV's

Several auto makers have urged the National Highway Traffic Safety Administration to require that multipurpose passenger vehicles (MPV's), such as vans, mobile homes and Jeep type vehicles, meet some — but not all — passenger car safety standards.

Their move is in response to a recent NHTSA proposal to apply all passenger car standards to one category of MPV's — those not built on a "truck chassis." The NHTSA proposal is meant to "put the auto industry on notice" that the agency is "intensifying its efforts to extend to other vehicles many of the federal standards currently applicable only to passenger cars," according to a press release.

MPV'S are currently exempt from many safety standards — including those requiring energy-absorbing steering columns, interior padding and head restraints — that passenger cars must meet. NHTSA now defines a multipurpose passenger vehicle as a motor vehicle designed to carry ten persons or less "which is constructed either on a truck chassis or with special features for occasional off-road operation."

The agency recently proposed to delete the "off-road operation" section of the definition. Thus, only vehicles built on a "truck chassis," a term the agency has not defined, could be classified as a MPV under the proposed definition. The effect of the change would be *de facto* application of all passenger car safety standards to MPV's currently exempt from most of those standards because of their "off-road operation" features.

Vehicle manufacturers have unanimously opposed the agency's proposed definition. Typical of the industry's response was Volkswagen's charge that the proposed agency action involves a "mass imposition" of safety standards without "consideration of the practicability or appropriateness" of the standards for MPV's. The "actual effect" of the proposed definition "would be to do away with all Jeep type vehicles," Volkswagen said.

Impetus for the agency rule making came from controversy over whether Volkswagen's new vehicle, "The Thing," should be classified as a passenger car or a MPV. NHTSA sought to resolve the controversy by redefining MPV's to exclude vehicles such as "The Thing." (See *Status Report*, Vol. 8, No. 18, Oct. 5, 1973.)

Many manufacturers urged the agency to make limited application of passenger car standards to all MPV's, instead of changing the definition of MPV's. Volvo of America Corp. told NHTSA that it has "been too slow to extend" passenger car standards to MPV's. Volvo said "it is quite obvious" that MPV's can "incorporate additional safety features which are developed for passenger cars." Volvo urged the agency to "proceed with all haste" to correct the current situation.

Volkswagen told NHTSA that it would concur with agency moves to eliminate many of the safety standard exemptions for "Jeep type" MPV's, such as "The Thing." VW cited the requirements on fuel tank crashworthiness, energy-absorbing steering columns and interior padding as among the safety standards that could be applied to MPV's.

The American Imported Automobile Dealers Association urged NHTSA to "take immediate steps to establish the most necessary standards for" MPV's. AIADA suggested "roll bars and seat belts" for MPV's to be "followed in short order" by other standards "making MPV's as safe as passenger vehicles." MPV's have been required since July 1, 1971, to have lap belts.

International Harvester Co. also encouraged NHTSA to drop its proposed definition and in its place expedite the application of "workable and appropriate" passenger car standards to "MPV's and light trucks."

Continuing its opposition to any safety standard exemptions for MPV's, the Center for Auto Safety urged NHTSA to eliminate the MPV category altogether. The Center noted that many MPV's, "which often carry more passengers than the largest passenger car, the 9-passenger, full sized station wagon," continue to be exempt from "several crucial" safety standards.

Specific concerns manufacturers had with NHTSA's proposed definition include:

- The proposed definition "would restrict manufacturers in development of vehicles designed for occasional off-road usage," General Motors said. The auto maker argued that the Congress did not intend that "all types of vehicles should meet the same standards."

- Volkswagen said that the application of safety standards to some vehicles and not to others "simply on the basis of the type of chassis involved" is "completely arbitrary."

- Both Chrysler Corp. and Jeep Corp. called for an expansion of the current MPV definition. Chrysler urged adoption of "objective criteria or tests" for defining vehicles designed for "off-road operation." Jeep requested the creation of a separate rulemaking category for four wheel drive vehicles. Such vehicles "may not be able to achieve the same performance levels" specified in federal safety standards for two wheel drive vehicles," Jeep said.

Physicians Push Bus Bill

Physicians for Automotive Safety has called on its members to lobby the Congress for a bill authorizing school bus safety standards (HR 4187).

"More than 20 million youngsters daily travel in school buses that are devoid of the most basic provisions for passenger protection. The recommendations of the Department of Transportation's own National Transportation Safety Board, which has investigated a number of fatal school bus accidents, continue to be ignored. Buses are lacking in structural integrity; safety experts have likened them to 'cookie cutters,' because the sheet metal box, mounted on a truck chassis, is pulled apart in a crash, exposing lethal sharp and jagged edges. The hard bench-like seats with their exposed steel rails on the top can injure even in a sudden stop," the New Jersey-based organization told its members.

The bill supported by the group would, among other things, call on DOT to build a prototype safety bus and establish standards for school bus floor strength, seat anchorages, seats, body and frame, emergency exits, and fuel and exhaust systems.

'Bleak Picture' Forecast By NHTSA Official

Highway crash fatalities in the United States may reach as high as 75,000 annually by 1980 if government fails to strengthen its motor vehicle and state safety program efforts, a respected National Highway Traffic Safety Administration official has warned.

In an article published in an NHTSA newsletter, Jack L. Goldberg, the agency's associate administrator for planning and programming, foresaw a "bleak picture from the safety standpoint" if present fatality and injury trends continue. The article was published shortly before Mr. Goldberg's death on October 10, 1973.

Predicting that the current energy crisis "will be met by a strong increase in sales of compact and subcompact autos," Mr. Goldberg pointed out that the result will be "very troublesome for safety. One research team has estimated that safety (crashworthiness) decreases 2.5 per cent for each 100 pounds decrease in weight."

(Crash tests conducted by the Insurance Institute for Highway Safety also have indicated huge disparities between the occupant protection capabilities of small and larger vehicles, with much greater exposure to death and serious injury for small-car occupants. (See *Status Report* Vol. 6, No. 21, Nov. 16, 1971.)

"Most other risk factors are also working against us," Mr. Goldberg warned. "Motorcycle fatalities will double; the bicycle safety problem cannot be predicted but is frightening because of the tremendous sales; pedestrian deaths will increase by 30 per cent and there is yet no real countermeasures program; alcohol consumption is increasing at two per cent per capita each year; higher-risk night and weekend driving is increasing, and the four-day week will accelerate this trend," he said.

"In simple terms, if nothing else is done to strengthen state programs and no new motor vehicle standards are set, fatalities in the U. S. could reach 75,000 by 1980 We will have to run very hard indeed to stay even — at the current appalling level of traffic casualty. Death and injury *rates* should continue to be reduced but it must not be assumed that this reduction will continue forever."

Mr. Goldberg had served with NHTSA since 1968, and was appointed associate administrator in 1972. His article appeared in the October, 1973 issue of NHTSA's *Traffic Safety Newsletter*.

Tofany To Head NSC

Vincent L. Tofany has been selected to succeed retiring Howard Pyle as president of the Chicago-based National Safety Council. Tofany had been New York state's motor vehicle commissioner since 1967.

Among other things, Tofany is credited with initiating New York's program for the administrative adjudication of traffic violations.

the highway
loss reduction

STATUS REPORT

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