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DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA-2018-0004; Notice 2]

Daimler Trucks North America, LLC, Grant of Petition for Decision of Inconsequential Noncompliance

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Grant of petition.

SUMMARY: Daimler Trucks North America, LLC (DTNA), has determined that certain model year (MY) 2013-2018 Thomas Built Buses do not fully comply with Federal Motor Vehicle Safety Standard (FMVSS) No. 222, *School Bus Passenger Seating and Crash Protection*. DTNA filed a noncompliance report dated November 27, 2017. DTNA in collaboration with SynTec Seating Solutions, LLC (SynTec), the seating manufacturer, subsequently petitioned NHTSA on December 15, 2017, and later amended it on September 21, 2018, for a decision that the subject noncompliance is inconsequential as it relates to motor vehicle safety. This document announces the grant of DTNA's petition.

FOR FURTHER INFORMATION CONTACT: Daniel Lind, Office of Vehicle Safety Compliance, the National Highway Traffic Safety Administration (NHTSA), telephone (202) 366-7235.

SUPPLEMENTARY INFORMATION:

I. Overview

DTNA has determined that certain MY 2013-2018 Thomas Built Buses do not fully comply with paragraph S5.3.1.3 of FMVSS No. 222, *School Bus Passenger Seating and Crash Protection* (*See* 49 CFR 571.222). DTNA filed a noncompliance report dated November 27, 2017, pursuant to 49 CFR part 573, *Defect and Noncompliance Responsibility and Reports.*

DTNA subsequently petitioned NHTSA on December 15, 2017, and later amended it on September 21, 2018, for an exemption from the notification and remedy requirements of 49 U.S.C. Chapter 301 on the basis that this noncompliance is inconsequential as it relates to motor vehicle safety, pursuant to 49 U.S.C. 30118(d) and 30120(h) and 49 CFR part 556, *Exemption for Inconsequential Noncompliance or Defect*.

Notice of receipt of DTNA's petition was published, with a 30-day public comment period on May 13, 2019, in the **Federal Register** (*See* 84 FR 20951). One comment was received. To view the petition and all supporting documents log onto the Federal Docket Management System (FDMS) website at https://www.regulations.gov/. Then follow the online search instructions to locate docket number "NHTSA-2018-0004."

II. Buses Involved

Affected are approximately 3,222 MY 2013-2018 versions of the following Thomas Built Buses, manufactured between August 24, 2012, and May 1, 2017, specifically:

- Thomas Built Buses Saf-T-Liner C2
- Thomas Built Buses Saf-T-Liner EFX
- Thomas Built Buses Saf-T-Liner HDX
- Thomas Built Buses Minotour DRW

III. Noncompliance

DTNA explains that the noncompliance is that the subject buses are equipped with seats that have Type 2 (lap/shoulder) seat belts, manufactured by SynTec, that do not meet the head form force distribution requirements as specified in paragraph S5.3.1.3 of FMVSS No. 222. Specifically, the Type 2 seat belts include a plastic bezel, where the seat belt is routed through the seat, located within the head protection zone.

IV. Rule Requirements

Paragraph S5.3.1.3 of FMVSS No. 222, titled "Head form force distribution" includes the requirements relevant to this petition:

> When any contactable surface of the vehicle, within the zones specified in paragraph S5.3.1.1, is impacted from any direction at 6.7 m/s by the head form described in paragraph S6.6, the energy necessary to deflect the impacted material shall be not less than 4.5 joules before the force level on the head form exceeds 667 N. When any contactable surface, within such zones, is impacted by the head form from any direction at 1.5 m/s the contact area on the head form surface shall be not less than 1,935 mm^2.

S4 of the standard defines "contactable surface" as follows:

> Contactable surface means any surface within the zone specified in S5.3.1.1 that is contactable from any direction by the test device described in S6.6, except any surface on the front of a seat back or restraining barrier 76 mm or more below the top of the seat back or restraining barrier.

V. Summary of DTNA's Petition

DTNA described the subject noncompliance and stated its belief that the noncompliance is inconsequential as it relates to motor vehicle safety.

In support of its petition, DTNA provided the following background information:

1. In January 2011, SynTec introduced the M2K lap/shoulder seat to provide several additional safety features to passengers. The company sold 2,272 M2K lap/shoulder seats to Thomas Built Buses before discontinuing the product in 2012. SynTec then improved upon the M2K lap/shoulder seat design with the S3C seat, which the Company introduced in 2012. The seat backs of these seats are substantially higher than earlier school bus passenger seats and are equipped with lap/shoulder seat belts. The seat also includes: color coding and key buckles to prevent improper buckling, a fixed buckle anchorage to prevent side occupant incursion, flip up buckles in pockets to be out of the way from debris, high shoulder anchorage, and contoured seat cushion. The plastic "bezel" (the location from which the lap/shoulder harness exits the seat back) was intentionally set high on the seat fronts to provide protection to the maximum range of occupants. Some M2K and S3C seats also are equipped with an integrated child seat.
2. To ensure that the Affected Seats complied with all laws and regulations, SynTec contracted with a third party, MGA Research Corporation (MGA), to conduct

certification testing under FMVSS No. 222. Specifically, MGA conducted tests on the M2K seat in June 2011, and on the S3C seat in August 2012. The M2K and S3C complied with FMVSS No. 222 requirements with respect to the back of the seat. Consistent with the industry norm and MGA's past practice, MGA did not test targets on the front of the seat. Based on its interactions and conversations with MGA, SynTec understood that back seat-only testing represents the industry norm. Front of the seat testing is not conducted due to the low risk of harm from the front, and because the small head impact zone makes it impossible to conduct the test per the recommended test procedure. Indeed, as referenced above, the testing was designed to ensure that the back of the seat was an energy absorber and that various hazards were eliminated from the top. Nonetheless, these early MGA tests results, specifically, the product's head injury criterion (HIC) values and the strong contact area and impact velocity scores on the back of the seat, highlighted the improved safety benefits of SynTec's new seat design.

In support of its petition, DTNA provided the following reasoning:

1. The S5.3.1.3 tests are outmoded for the front of the seat and the equipment's HIC scores represent the most accurate accounting of the seat's safety.
2. As highlighted above, the original intent of the contact surface test was to precipitate the elimination of metal grab bars and other hostile objects above the passenger seats that could come into contact with the occupant's head in the event of a crash. *See* 38 FR 4776 (Feb. 22, 1973) (Proposed Rule) stating the goal of “eliminating exposed metal bars and similar designs and making the seat itself a significant energy absorber." Likewise, the head form force distribution test was designed to ensure that the seat would depress and distribute the force of impact in a manner that could not be achieved with exposed metal surfaces on the seat.

3. Although SynTec was noncompliant with these two tests, the requirements are now outmoded with respect to the front of the affected seats because the various hazards they are seeking to guard against no longer exist. Indeed, the noncompliance did not occur because of a hazard that the regulations were designed to protect against. Rather, as explained below, the noncompliance resulted from a high-placed bezel that actually makes the affected seats safer for more occupants. The two tests were crafted for a school bus seat design that was substantially different and less safe than the superior versions that exist in the market today.
4. Given that these tests are outmoded, the most accurate measure of head safety for the front of the seat is the product's HIC value. The HIC is the most widely accepted measure of head injury in use today. Indeed, it is the standard measure of head injury throughout the FMVSSs. *See*, e.g., FMVSS No. 201 and 208. Similarly, HIC is the metric used by NHTSA's New Car Assessment Program. *See* 80 FR 78522, 78533 (2015) noting that the HIC value "is currently in use in FMVSS No. 208 and frontal NCAP tests." The HIC measure is particularly valuable since it accounts for energy absorption and contact area by measuring the deceleration of the head form over time.
5. Over the past few years, both SynTec and NHTSA, internally and at accredited external test agencies, have conducted HIC testing on the front of the affected seats. During testing, the seats were positioned at various angles, and impacts were performed on multiple locations of the seat within the head protection zone "hits", including on the portion of the plastic bezel that protrudes into the top 76 mm on the front. These test results always produced a HIC value well below 1,000. For instance, since March 2017 SynTec has conducted 253 "hits" on the front of the seat. The average HIC value during these tests was 114.1, with a low score of 51.7 and a high HIC value of 311.8. Even the product's highest HIC value falls far short of the 1,000 maximum requirement. These

values illustrate the safety of SynTec's product and the inconsequentiality of the noncompliance with the other FMVSS No. 222 test requirements.

6. Simply stated, the tests which prompted DTNA and SynTec's 573 Reports, are searching for hazards on the front of the seat that do not exist in the affected seats. *See* 38 FR 4776 (Feb. 22, 1973) (Proposed Rule). As the product's HIC values show, the technical noncompliance of the SynTec seats on these two tests is not relevant to the product's safety. Accordingly, NHTSA should grant this petition for inconsequentiality.
7. The source of SynTec's noncompliance enhances the product's safety. SynTec's seats are safer than regulators could have envisioned in 1976. Indeed, the cause of the noncompliance, the location of the plastic bezel, renders the seat safer than it would be with a bezel that was not placed in the head protection zone. This higher positioning combined with higher seat backs provides a belt for a maximum range of occupants and keeps hard objects away from the most vulnerable passengers. SynTec utilized automotive best practices and BELFIT software from the Motor Industry Research Association to determine the optimum geometric place for the belt position. SynTec's objective was to provide maximum protection, considering the wide range of occupant sizes riding on a school bus. Based on this analysis, it placed the bezel at the higher portion of the seat. The position also allowed for more adjustment by the d-ring, for better torso restraint, and for a more comfortable fit (thereby encouraging use).
8. The higher shoulder harnesses also keep hard surfaces away from small occupants who are most vulnerable. A typical occupant in the vehicle would have a greater chance of coming into contact with a lower bezel. In seats with lap/shoulder belts with a lower bezel, the bezel would land in a smaller occupant's head area. Similarly, most designs that include an integrated child seat, have a hard surface that sits behind a smaller occupant's head. In contrast, the affected seat's higher bezel location places the bezel outside of a smaller occupant's head area. Likewise, for smaller occupants using

integrated child seats, the bezel also falls outside of the occupant head area. Essentially, the higher bezel ensures better protection for the most vulnerable riders. Rather than cause any safety issues, the noncompliance, which occurred because of the location of the plastic bezels, makes the affected seats safer.

9. The noncompliance at issue relates to front-of-seat tests designed to address features that are no longer present in school buses, such as metal bars at the top of seat backs and low seat backs. Therefore, DTNA believes the noncompliance is inconsequential as it relates to school bus safety. Moreover, the location of the plastic bezel on the lap/shoulder belts, which is the source of the noncompliance, is actually a safety improvement, in that its high position allows for maximum occupant ranges and fit and protects the smallest seat occupants. A typical occupant in the vehicle would have a greater chance of encountering a compliant lower bezel.
10. Thus, the design represents an enhanced level of safety for school bus occupants, especially younger passengers who are more vulnerable in the event of a crash. Consistent with the enhanced safety design of the lap/shoulder belt, DTNA is not aware of any complaints, injuries or reports of safety concerns regarding this issue. DTNA's seat supplier, SynTec, implemented a new seat design which corrected the noncompliance by replacing the hard plastic bezel with a soft vinyl harness cover and increasing the seat thickness by 3/8 inches as of May 3, 2017.
11. NHTSA Precedents – DTNA notes that NHTSA has previously granted petitions for decisions of inconsequential noncompliance for a wide range of issues where a technical non-compliance exists but does not create a negative impact on safety. In the case detailed within this petition, the lap/shoulder belt is an optional feature on the clear majority of school buses. When added, lap/shoulder belts increase the safety of the occupants as compared to a bus without passenger seatbelts. Also, the high bezel increases the child protection performance requirements by reducing the likelihood of an

occupant coming into contact with the hard surface. The following examples are petitions for inconsequentiality that were granted by NHTSA and are described within this petition to support DTNA's argument that, while technically non-compliant, NHTSA has previously granted inconsequentiality for cases where an additional level of safety above the requirements of the standard is provided.

12. *See* 70 FR. 24464 (May 9, 2005), Docket No. NHTSA 2005-20545 (Grant of Petition for IC Corporation) for an example of a petition for inconsequentiality that was granted by NHTSA. In this instance, school buses were manufactured that were not compliant with FMVSS 217, but it was deemed inconsequential because it did not compromise safety. "…The Agency agrees with IC that in this case the noncompliance does not compromise safety in terms of emergency exit capability in proportion to maximum occupant capacity, access to side emergency doors, visibility of the exits, or the ability of bus occupants to exit after an accident."
13. *See* also 63 FR 32694 (June 15, 1998), Docket No. NHTSA 98-3791 (Grant of Petition for New Flyer of America, Inc.) for another example of a petition for inconsequentiality that was granted. In this case, non-school buses were manufactured that were not compliant with FMVSS No. 217 but were granted inconsequentiality because the buses had additional safety features that were not required in the standard. The following quote is from NHTSA's notice granting the petition: "Thus, the buses have the minimum number of emergency exits required by FMVSS No. 217. However, these exits were not distributed properly. Instead of a second emergency exit on the right side, these buses have an additional roof exit. This additional roof exit would provide for much needed emergency exit openings should the bus occupants need to evacuate due to a rollover incident. While this additional roof exit is not required by the standard, it does provide for an additional level of safety in the above situation. In consideration of the foregoing,

NHTSA has decided that the applicant has met its burden of persuasion that the noncompliance it described above is inconsequential to motor vehicle safety." Id.

DTNA's complete petition and all supporting documents are available by logging onto the Federal Docket Management System (FDMS) website at: https://www.regulations.gov/ and following the online search instructions to locate the docket number listed in the title of this notice.

In summation, DTNA believes that the described noncompliance in the subject buses is inconsequential as it relates to motor vehicle safety, and that its petition to exempt DTNA from providing notification of the noncompliance, as required by 49 U.S.C. 30118, and a remedy for the noncompliance, as required by 49 U.S.C. 30120, should be granted.

VI. Public Comments

One comment was received from Freedman Seating Company (FSC), which has designed and manufactured passenger seats for the school/activity bus market for over 20 years. The commenter agreed with DTNA's arguments regarding rear surface seat back-only testing represents the industry norm, that front of the seat back testing is generally not conducted due to the low risk of harm from the front, that the front surface of the seat back is low risk for head impact and injury potential as the normal position of the seat occupant is with the head against the front surface of the seat back or very close to it, that the head impact zones identified in the FMVSS No. 222 test procedure are relatively small areas and would make it challenging to do head impact testing given the size of the head form and the seat contour of some seat designs, and that the most accurate measure of head safety for the front of the seat is the product's HIC values.

VII. NHTSA's Analysis

A. General Principles

Congress passed the National Traffic and Motor Vehicle Safety Act of 1966 (the "Safety Act") with the express purpose of reducing motor vehicle accidents, deaths, injuries, and

property damage. *See* 49 U.S.C. 30101. To this end, the Safety Act empowers the Secretary of Transportation to establish and enforce mandatory Federal Motor Vehicle Safety Standards (FMVSS). *See* 49 U.S.C. 30111. The Secretary has delegated this authority to NHTSA. *See* 49 CFR 1.95.

NHTSA adopts an FMVSS only after the agency has determined that the performance requirements are objective and practicable and meet the need for motor vehicle safety. *See* 49 U.S.C. 30111(a). Thus, there is a general presumption that the failure of a motor vehicle or item of motor vehicle equipment to comply with an FMVSS increases the risk to motor vehicle safety beyond the level deemed appropriate by NHTSA through the rulemaking process. To protect the public from such risks, manufacturers whose products fail to comply with an FMVSS are normally required to conduct a safety recall under which they must notify owners, purchasers, and dealers of the noncompliance and provide a free remedy. *See* 49 U.S.C. 30118-30120. However, Congress has recognized that, under some limited circumstances, a noncompliance could be "inconsequential" to motor vehicle safety. It therefore established a procedure under which NHTSA may consider whether it is appropriate to exempt a manufacturer from its notification and remedy (i.e., recall) obligations. *See* 49 U.S.C. 30118(d), 30120(h). The agency's regulations governing the filing and consideration of petitions for inconsequentiality exemptions are set out at 49 CFR part 556.

Under the Safety Act and Part 556, inconsequentiality exemptions may be granted only in response to a petition from a manufacturer, and then only after notice in the Federal Register and an opportunity for interested members of the public to present information, views, and arguments on the petition. In addition to considering public comments, the agency will draw upon its own understanding of safety-related systems and its experience in deciding the merits of a petition. An absence of opposing argument and data from the public does not require NHTSA to grant a manufacturer's petition. Neither the Safety Act nor Part 556 define the term "inconsequential." Rather, the agency determines whether a particular noncompliance is inconsequential to motor

vehicle safety based upon the specific facts before it in a particular petition. In some instances, NHTSA has determined that a manufacturer met its burden of demonstrating that a noncompliance is inconsequential to safety. For example, a label intended to provide safety advice to an owner or occupant may have a misspelled word, or it may be printed in the wrong format or the wrong type size. Where a manufacturer has shown that the discrepancy with the safety requirement is unlikely to lead to any misunderstanding, NHTSA has granted an inconsequentiality exemption, especially where other sources of correct information are available. *See*, e.g., General Motors, LLC., Grant of Petition for Decision of Inconsequential Noncompliance, 81 FR 92963 (Dec. 20, 2016).

The burden of establishing the inconsequentiality of a failure to comply with a *performance requirement* in a standard—as opposed to a *labeling requirement*—is more substantial and difficult to meet. Accordingly, the Agency has not found many such noncompliances inconsequential.[1] Potential performance failures of safety-critical equipment, like seat belts or air bags, are rarely deemed inconsequential.

An important issue to consider in determining inconsequentiality based upon NHTSA's prior decisions on noncompliance issues was the safety risk to individuals who experience the type of event against which the recall would otherwise protect.[2] NHTSA also does not consider the absence of complaints or injuries to show that the issue is inconsequential to safety. "Most importantly, the absence of a complaint does not mean there have not been any safety issues, nor does it mean that there will not be safety issues in the future."[3] "[T]he fact that in past reported

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[1] *Cf. Gen. Motors Corporation; Ruling on Petition for Determination of Inconsequential Noncompliance*, 69 FR 19897, 19899 (Apr. 14, 2004) (citing prior cases where noncompliance was expected to be imperceptible, or nearly so, to vehicle occupants or approaching drivers).

[2] *See Gen. Motors, LLC; Grant of Petition for Decision of Inconsequential Noncompliance*, 78 FR 35355 (June 12, 2013) (finding noncompliance had no effect on occupant safety because it had no effect on the proper operation of the occupant classification system and the correct deployment of an air bag); *Osram Sylvania Prods. Inc.; Grant of Petition for Decision of Inconsequential Noncompliance*, 78 FR 46000 (July 30, 2013) (finding occupant using noncompliant light source would not be exposed to significantly greater risk than occupant using similar compliant light source).

[3] *Morgan 3 Wheeler Limited; Denial of Petition for Decision of Inconsequential Noncompliance*, 81 FR 21663, 21666 (Apr. 12, 2016).

cases good luck and swift reaction have prevented many serious injuries does not mean that good luck will continue to work."[4]

Arguments that only a small number of vehicles or items of motor vehicle equipment are affected have also not justified granting an inconsequentiality petition.[5] Similarly, NHTSA has rejected petitions based on the assertion that only a small percentage of vehicles or items of equipment are likely to actually exhibit a noncompliance. The percentage of potential occupants that could be adversely affected by a noncompliance does not determine the question of inconsequentiality. Rather, the issue to consider is the consequence to an occupant who is exposed to the consequence of that noncompliance.[6]

B. Response to DTNA's Arguments

NHTSA reviewed DTNA's arguments that the subject noncompliance is inconsequential to motor vehicle safety. DTNA contends that the plastic bezel, where the Type 2 seat belt is routed through the seat, being located within the head protection zone and not meeting the head form force distribution requirements as specified in paragraph S5.3.1.3 of FMVSS No. 222, poses little, if any, risk to motor vehicle safety. NHTSA agrees. NHTSA's decision considered the following arguments:

The purpose of FMVSS No. 222 is to reduce the number of deaths and the severity of injuries that result from the impact of school bus occupants against structures within the vehicle during crashes and sudden driving maneuvers (*See* 49 CFR 571.222 S2). The requirements at S5.3.1.3 *Head Form Force Distribution* of FMVSS No. 222, at issue here, are specific to the

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[4] *United States v. Gen. Motors Corp.*, 565 F.2d 754, 759 (D.C. Cir. 1977) (finding defect poses an unreasonable risk when it "results in hazards as potentially dangerous as sudden engine fire, and where there is no dispute that at least some such hazards, in this case fires, can definitely be expected to occur in the future").

[5] *See Mercedes-Benz, U.S.A., L.L.C.; Denial of Application for Decision of Inconsequential Noncompliance,* 66 FR 38342 (July 23, 2001) (rejecting argument that noncompliance was inconsequential because of the small number of vehicles affected); *Aston Martin Lagonda Ltd.; Denial of Petition for Decision of Inconsequential Noncompliance*, 81 FR 41370 (June 24, 2016) (noting that situations involving individuals trapped in motor vehicles—while infrequent—are consequential to safety); *Morgan 3 Wheeler Ltd.; Denial of Petition for Decision of Inconsequential Noncompliance*, 81 FR 21663, 21664 (Apr. 12, 2016) (rejecting argument that petition should be granted because the vehicle was produced in very low numbers and likely to be operated on a limited basis).

[6] *See Gen. Motors Corp.; Ruling on Petition for Determination of Inconsequential Noncompliance*, 69 FR 19897, 19900 (Apr. 14, 2004); *Cosco, Inc.; Denial of Application for Decision of Inconsequential Noncompliance*, 64 FR 29408, 29409 (June 1, 1999).

areas of school bus seats where one's head may impact during an emergency event. The head protection zone is an area in front of each school passenger seat that is not occupied by bus sidewall, window, or door structure.[7] For seats other than the front seat, this area encompasses the seat back of the seat in front of it. When the front of a seat back falls within the head protection zone of the seat behind it, only the top 76 mm (3 inches) of the front of the seat back is a contactable surface. The seat backs of the rearmost seats do not fall within the head protection zone and are not contactable surfaces. We can therefore conclude that the head protection requirements were not designed to protect an occupant from impacting a surface located behind them.

The requirements at issue are twofold: (1) the energy absorbed by the seat "shall be not less than 4.5 joules", and (2) the contact made with the seat by the test headform "shall be not less than 1,935 mm^2." In the present case, the seats fail to meet both of these requirements at the locations where the plastic "bezel" (the location from which the lap/shoulder harness exits the seat back) for the Type 2 seatbelts are integrated into the seats. However, the head protection requirements are intended to protect occupants of the seat located behind the seat back on which the bezel is mounted and it is unlikely that such occupant's head would impact the bezel given the size of the bezel, particularly if the occupant is belted. For this reason, NHTSA accepts DTNA's argument that, in this case, the safety benefits of the high-placed bezel location outweigh the safety risks. This is further discussed below.

Reviewing the history of this standard and the definitions for the *Head Protection Zone* and *Contactable Surface*, we found FMVSS No. 222 was initially proposed as a new vehicle safety standard on February 22, 1973 (*See* 38 FR 4776). The preamble in the proposed rule described the intention behind the modern-day requirements of paragraph S5.3.1.3, as it stated:

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[7] These areas are defined as a combination of the *Head Protection Zone* (*See* 49 CFR 571.222 S5.3.1) and *Contactable Surface* (*See* 49 CFR 571.222 S4).

> "A final characteristic of present bus seats, notably in school buses and transit type buses, is the presence of metal bars on the seat back to be used by standees. There is evidence that these hard surfaces are often the causes of injury, particularly to the head and face. A compilation of data from oral surgeons indicated that approximately 1,350 mouth injuries occurred during 1971. This represents only a part of the painful and disfiguring injuries that are due to these features.
>
> To eliminate exposed metal bars and similar designs and to make the seat itself a significant energy absorber, NHTSA proposes to require all surfaces within a specified area ahead of the seat to meet a head impact criterion, similar to the one included in Standard 208, occupant crash protection. The test is administered by impacting a head form device into any surface within a specified area in front of each seat. The impacted surface must be able to keep the deceleration of the head form below a certain level. In addition, the surface must depress in a manner that absorbs energy and distributes the force of impact. Most types of exposed metal surfaces would be too hard and would therefore not meet the requirements of the proposed standard."

In response to comments received on the proposed rule, a revised proposed rule was published on July 30, 1974 (*See* 39 FR 27585). This revised version of the proposed rule included the modern-day requirements[8] specified in paragraph S5.3.1.3 (albeit using English units), including the definition for "contactable surface",[9] which is referred to in paragraph S5.3.1.3,

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[8] There were two more proposed FMVSS No. 222 rules published, as the rule continued to be developed and comments were received on different sections of the proposed rule (*See* 40 FR 17855, April 23, 1975 and 40 FR 47141, October 8, 1975), however no further updates were made to the definition of "contactable surface" or to the requirements specified in paragraph S5.3.1.3. The final rule was published on January 28, 1976 (*See* 41 FR 4018).

[9] The definition for "contactable surface" includes the top 76 mm of the front of each school bus seat, which is the area at issue here, and where the plastic bezels are located within.

> "Contactable surface means any surface within the zone specified in S5.3.1.1 that is contactable from any direction by the test device described in S6.6, except any surface on the front of a seat back or restraining barrier 76 mm or more below the top of the seat back or restraining barrier."

Regarding the intent of the requirements at S5.3.1.3 related to the top 76 mm of the front of each school bus seat, NHTSA agrees with DTNA that such requirements were primarily for a time when the school bus industry utilized exposed metal bars for standing passengers, which is no longer the case. However, NHTSA does not agree with DTNA's argument that the requirements at S5.3.1.3 are outmoded, as it is important to retain such requirements to prevent the return of such hazards to passengers riding school buses. As such, NHTSA is persuaded by DTNA's argument that the original hazards which prompted the requirements at S5.3.1.3 no longer exist, but NHTSA is not persuaded that such requirements are outmoded.

Regarding the safety benefits of the high-placed bezel, NHTSA agrees with DTNA that in this case, the safety benefits of the high-placed bezel outweigh the safety risks. The head protection requirements are intended to protect the occupant located behind the seat back on which the bezel is located. While this location is a contactable surface, it is unlikely that the occupant will override the seat and impact the bezels given the location and size of the bezels, particularly if the occupant is belted. Additionally, the low HIC values presented by DTNA's testing and the higher location of the bezel placements, indicate a low safety risk to passengers, especially more vulnerable passengers. As such, NHTSA is persuaded by DTNA's argument that the safety benefits of the high-placed bezel outweigh the safety risks in the present case.

Regarding the ability to test the front areas within the *Head Protection Zone* and *Contactable Surface*, NHTSA does not agree with DTNA's argument that it is impossible to conduct head impact testing within the top 76 mm of the front of each school bus seat, as NHTSA's own testing laboratories have been able to successfully perform such tests, as part of the school bus compliance test program. Additionally, DTNA's own argument indicates

successful testing both "internally and at accredited external test agencies" for HIC measurements on seat backs where the bezels are located. As such, NHTSA is not persuaded by DTNA's argument that it is impossible to conduct such testing on the front of seats.

C. Remaining Arguments

DTNA referenced two inconsequential noncompliance petitions NHTSA had previously granted to support its petition.

The first petition, from IC Corporation (IC) (*See* 70 FR 24464), involved school buses where two side emergency exit doors were located opposite each other within the same post and roof bow panel space. IC argued that the requirement prohibiting two exit doors from being located in this manner appeared to be related to the structural integrity of a bus body with this configuration. IC indicated that it had no reports of any structural failures in the area around the emergency doors but stated that it would extend to owners of the noncompliant vehicles a 15-year warranty for any structural or panel failures related to the location of the doors. NHTSA agreed with IC that, in this case, the noncompliance did not compromise safety in terms of emergency exit capability in proportion to maximum occupant capacity, access to side emergency doors, visibility of the exits, or the ability of bus occupants to exit after an accident. NHTSA does not agree that granting this prior petition supports DTNA's arguments in this case. Here, the issue is occupant crash protection against structures within the vehicle.

The second petition, from New Flyer of America, Inc. (*See* 63 FR 32694), involved transit buses that had only one emergency exit on the right side of the bus instead of two, as required by FMVSS No. 217. In this case, these buses had 3.28 times the required exit area, with two emergency exit windows on the left side, one emergency exit window on the right side and two roof exits. Thus, the buses had the minimum number of emergency exits required by FMVSS No. 217. However, these exits were not distributed properly. Instead of a second emergency exit on the right side, these buses had an additional roof exit. The agency decided that the additional roof exit provided for an additional level of safety during a rollover event and

granted the petition. Again, NHTSA does not agree that granting this prior petition supports granting DTNA's petition here, because occupant crash protection against structures within the vehicle was not at issue.

D. Response to Public Comment Received

In response to the comment received, NHTSA agrees with the commenter regarding rear surface seat back-only testing represents the industry norm, as the industry has moved away from metal bars on the seat back to be used by standees and the contactable surface of the front of the seat is generally constructed only of soft materials. NHTSA does not agree with the commenter that the head impact zones identified in the FMVSS No. 222 test procedure are relatively small areas and would make it challenging to do head impact testing, as such testing has been successfully completed by NHTSA contracted labs in past school bus compliance tests. NHTSA also agrees with the commenter that the HIC values are an important measurement for evaluating head impact protection in the head form force distribution requirements at S5.3.1.3 of FMVSS No. 222, but notes that the energy absorption requirements in S5.3.1.3 are also an important measurement to determine how much energy a seat can absorb in an emergency event.

VIII. NHTSA's Decision

In the instant case, NHTSA has determined that it is unlikely given the bezels' size and location that the occupants for which the head protection requirements are intended to protect will impact the bezel, and the overall safety benefits of retaining seats with three-point seat belts in this application outweigh the safety risks of the actual noncompliance. In consideration of the foregoing, NHTSA finds that DTNA has met its burden of persuasion that the FMVSS No. 222 noncompliance is inconsequential as it relates to motor vehicle safety. Accordingly, DTNA's petition is hereby granted and DTNA is exempted from the obligation of providing notification of, and a remedy for, the noncompliance under 49 U.S.C. 30118 and 30120.

NHTSA notes that the statutory provisions (49 U.S.C. 30118(d) and 30120(h)) that permit manufacturers to file petitions for a determination of inconsequentiality allow NHTSA to

exempt manufacturers only from the duties found in sections 30118 and 30120, respectively, to notify owners, purchasers, and dealers of a defect or noncompliance and to remedy the defect or noncompliance. Therefore, this decision only applies to the subject vehicles that DTNA no longer controlled at the time it determined that the noncompliance existed. However, the granting of this petition does not relieve vehicle distributors and dealers of the prohibitions on the sale, offer for sale, or introduction or delivery for introduction into interstate commerce of the noncompliant vehicles under their control after DTNA notified them that the subject noncompliance existed.

(**Authority:** 49 U.S.C. 30118, 30120: delegations of authority at 49 CFR 1.95 and 501.8.)

Otto G. Matheke III,

Director, Office of Vehicle Safety Compliance.

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