

this *NPRM*, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.

Federal Communications Commission.

Marlene H. Dortch,
Secretary.

[FR Doc. E7-9300 Filed 5-15-07; 8:45 am]

BILLING CODE 6712-01-P

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 571

[Docket No. NHTSA 2006-26339]

Federal Motor Vehicle Safety Standards; Occupant Crash Protection

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

ACTION: Denial of petition for rulemaking.

SUMMARY: This document denies a petition for rulemaking submitted by Siemens VDO to amend Federal Motor Vehicle Safety Standard (FMVSS) No. 208, "Occupant Crash Protection." The petition requests that the agency add a dynamic automatic suppression option under the advanced air bag options for the 12-month CRABI infant test dummy analogous to that for the 3-year and 6-year-old dummies.

FOR FURTHER INFORMATION CONTACT: For non-legal issues: David Sutula, Office of Crashworthiness Standards, at (202) 366-3273. Fax: (202) 493-2739.

For legal issues: Edward Glancy, Office of Chief Counsel, at (202) 366-2992.

Fax: (202) 366-3820.

You may send mail to these officials at the National Highway Traffic Safety Administration, 400 Seventh Street, SW., Washington, DC 20590.

SUPPLEMENTARY INFORMATION:

Table of Contents

- I. Background
- II. The Petition
- III. Data Submission and NHTSA Analysis
 - A. Data Submission
 - B. Ex Parte Meeting With Siemens, Volkswagen and Audi
 - C. NHTSA Analysis
- IV. Conclusion

I. Background

Federal Motor Vehicle Safety Standard (FMVSS) No. 208, "Occupant crash protection," specifies performance requirements for the protection of vehicle occupants in crashes (49 CFR 571.208). On May 12, 2000, we published an interim final rule that

amended FMVSS No. 208 to require advanced air bags (65 FR 30680; (Advanced Air Bag Rule). Among other things, the rule addressed the risk of serious air bag-induced injuries, particularly for small women and young children, and amended FMVSS No. 208 to require that future air bags be designed to minimize such risk. The Advanced Air Bag Rule established a rigid barrier crash test with a 5th percentile adult female test dummy, as well as several low risk deployment and static suppression tests using a range of dummy sizes and a number of specified child restraint systems (CRSs).

The Advanced Air Bag Rule allows for passenger side compliance through any of three options. The first option, Low Risk Deployment (LRD), defines a reduced deployment strength for occupants in close proximity to the air bag. The second option suppresses the air bag when a child is present. The third option, Dynamic Automatic Suppression (DASS), senses the location of an occupant with respect to the air bag, interprets the occupant characteristics and movement, and determines whether or not to allow the air bag to deploy. Performance tests for determining compliance with the LRD and suppression options were specified in the Advanced Air Bag Rule. A performance test for determining compliance with the DASS option was not specified in the rule because at that time it was not known what technologies would be used to attempt to meet the DASS option.

The agency received multiple petitions for reconsideration to the Advanced Air Bag Rule. Petitioners raised a large number of concerns about the various test procedures in their written submissions. The agency then addressed each petition in a **Federal Register** notice published on December 18, 2001, and made a number of refinements to the test dummy positioning procedures in the barrier tests and the low risk deployment tests used in the Advanced Air Bag Rule (66 FR 65376).

The December 18, 2001 response to petitions for reconsiderations (66 FR 65383) stated that:

To address the risks posed by passenger air bags, the rule requires vehicles to either (1) have a passenger air bag that deploys in a low-risk manner to out-of-position occupants, (2) to have a feature that suppresses the air bag when a young child is present in a variety of positions, or (3) to have a feature that suppresses the air bag when a passenger is out-of-position (including in dynamic events). *The risk minimization requirements must be met separately for 1-year-old, 3-year-old and 6-*

year-old children, and manufacturers may choose different options for these three classes of occupants [emphasis added]."

In making this statement, the agency clarified that for each dummy type, the selected "risk minimization" strategy had to be met in full for each dummy. That is, it was not acceptable to comply with only the suppression strategy for an infant in a rear facing child restraint system (RFCRS) and the low risk deployment strategy for an infant in a forward facing child restraint system (FFCRS). This was further emphasized in letters responding to request for interpretation from TRW Automotive (TRW)¹ and International Electronics and Engineering (IEE)² in July and October of 2003, respectively. The IEE interpretation also indicated that "[m]anufacturers may not use suppression technology to ensure that there will be no air bag deployment in the indicant test if they are certifying to the low risk deployment test."

In both regulatory and non-regulatory environments the agency has discussed extensively its concern about the danger of air bag deployment in the presence of an infant in a RFCRS. It was for this reason that the infant low risk deployment certification option effectively requires a broader range of crash severities for which the air bag must deploy in a low risk manner.

II. The Petition

On August 20, 2003, Siemens VDO (Siemens) petitioned the agency to amend FMVSS No. 208 to add a DASS option under the advanced air bag options for the 12-month-old CRABI infant test dummy. This would be an option analogous to that provided for the 3-year-old and 6-year-old dummies in S21.3 and S23.3, respectively. Siemens stated that "including the DASS option with the 1-year-old (12-month-old) dummy could have a positive impact on motor vehicle safety by enabling the development and certification of advanced air bag suppression systems."

The petition stated that the lack of a DASS option (for infants) is limiting advanced air bag technologies for the following reasons:

1. Using a vision-based DASS system it is not possible, under *all circumstances*, [emphasis added] to distinguish between a 12-month-old child in a FFCRS with a sunshield or blanket and a 5th percentile female. The system would suppress the air bag and eliminate potential benefits to children older than 1-year and small adults.

¹ Docket Management System NHTSA-2003-15650.

² Docket Management System NHTSA-2003-16296.

2. Test data Siemens submitted with the petition show that a 12-month-old properly positioned in a FFCSR is not at risk from a statically deploying air bag. In out-of-position (OOP) situations, the infant in the FFCSR does not have injury measures in excess of the required FMVSS No. 208 criteria.

3. A DASS option for the 12-month-old dummy would deactivate the air bag when the infant enters the air bag suppression zone. An infant in a rear facing child restraint system (RFCRS) would always be in this suppression zone.

Siemens believes that the agency has never expressed its reasoning for not allowing the DASS option for the 12-month-old dummy. The petitioner stated that if its petition were granted and the standard amended accordingly, it would submit a petition for a DASS test procedure in accordance with S27.1(a).

The petitioner's claimed need for the relief is predicated on the contention that their vision system cannot tell the

difference between a 12-month-old in a FFCSR covered by a blanket or sunshield (a test required in the suppression option for the 12-month-old dummy) and a 5th percentile female sitting in the passenger seat. Since the air bag must not be suppressed for the 5th percentile female, their vision system alone could not be used for a compliance strategy that suppresses for the 12-month-old and uses DASS for all other occupants.

III. Data Submission and NHTSA Analysis

A. Data Submission

Siemens provided sled and static testing data in support of their petition. The petitioner's stated goal of the testing was to determine:

1. The risk of injury from air bag deployment for infants and children in FFCSR; and

2. If there is any benefit to air bag deployment for small children.

The petitioner's test matrix consisted mostly of sled testing using the 3-year-old dummy. Tests were conducted with the dummy unrestrained and also restrained using two different CRSs. The tests were done in three positions of vehicle seat adjustment: Forward track/highest height (for/up), middle track/middle height (mid/mid), and rearward track/lowest height (rear/low). The sled speeds were reported as 16, 22, and 35 mph. Siemens also reported that a 10 mph out-of-position test was performed, but no data was provided for this test. Finally, Siemens also reported static air bag deployments using a 12-month-old dummy and four different CRSs. The complete test matrix is shown below in Table 1.

TABLE 1.—TEST DATA SUBMITTED IN SUPPORT OF PETITION

Air bag status	w/out air bag	w/air bag					
		Seat position					
Dummy	mid/mid	for/up misuse	for/up	mid/mid	rear/low	for/mid	for/mid misuse
3-year-old × 2 CRSs.	35 mph	16† and 35 mph.	35 mph	35 mph	35 mph.		
3-year-old unbelted.	22 mph	10 mph OOP	22 mph.			
12-month-old × 4 CRSs.	Static *	Static ‡.

† One child restraint.

* Both stages of a dual stage air bag.

‡ Current production single stage air bag.

B. Ex Parte Meeting With Siemens, Volkswagen and Audi

On June 17, 2004, representatives from Siemens and vehicle manufacturers, Volkswagen and Audi, met with NHTSA to discuss the Siemens petition. During the meeting, Siemens made a presentation reiterating the petition material.³ No new supporting data was provided, but the following additional justifications for granting the petition were presented:

- Maximizes the number of occupants that benefit from air bag protection.
- Minimizes the risk of air bag-induced fatalities.
- Avoids weight-based classification grey zones through a position-dependent deployment decision.

C. NHTSA Analysis

The petition requested that the agency allow a DASS option for the 12-month-old infant dummy. However, the dynamic test data submitted in support of the petition attempted to show the protective effect of the air bag for a belted 3-year-old dummy in two different CRSs and also unbelted, sitting in the vehicle seat. The agency does not consider this to be directly supportive of the petition in that a DASS option for the 3-year-old already exists.

The data submitted using the 12-month-old dummy were static first-stage air bag deployments. The dummy was placed in four different FFCSR. In one set of data the CRS was in-position and in another it was leaning forward. The space between the instrument panel and dummy head was not provided with the petition. However, in the June 17, 2004 meeting with the petitioners, they stated that the distance was approximately 100–200 mm (4–8 inches). None of the

dummy IARVs⁴ were exceeded, but for at least one CRS tested, the injury measures were within 80 percent of the head, neck and chest criteria limits.

The data showed that at some dummy distance from the air bag, a first-stage air bag deployment might not exceed the injury threshold for the 12-month-old dummy. However, it does not demonstrate that air bags have a potential protective effect for a 12-month-old occupant dummy in a dynamic environment as claimed in the petition.

IV. Conclusion

The DASS option is intended to provide manufacturers the flexibility of deploying an air bag when such a deployment would not be harmful, and potentially beneficial, as opposed to suppressing the air bag or relying on a low risk deployment. However, central to the DASS option is that when an air

³ Test Requirements for 1 YO Dummy in Standard No. 208, Information supporting the Siemens VDO petition for rulemaking, Washington DC, June 17, 2004. See the docket for this notice for a copy of the meeting materials.

⁴ Reference: S19 of FMVSS Standard No. 208.

bag is deployed, the risk of harm to an occupant is minimized. The petitioner has not provided such data, and instead presented dynamic test data using a 3-year-old test dummy. The agency's Special Crash Investigation data⁵ indicate that the only fatalities for children younger than 2-years old in FFCSRs were in pre-advanced air bag systems without suppression and when they were improperly used. However, the Special Crash Investigation data does not prove that an air bag deployment for a properly restrained

child in a FFCSR is not injurious. Although these fatalities might have been avoided through air bag suppression, it is not clear that a DASS system would provide comparable benefit to static suppression for a 12-month-old child.

Further, we believe that manufacturers will be able to, if they have not already done so, design DASS systems that can distinguish between the 5th percentile female test dummy and the 12-month-old test dummy in all positions required by the suppression option. Therefore, the requested relief is not necessary to implement a DASS

compliance strategy for 3-year-old and 6-year-old test dummies and suppression for the 12-month-old dummy.

In accordance with 49 CFR part 552, this completes the agency's review of the petition.

Authority: 49 U.S.C. 322, 30111, 30115, 30117 and 30162; delegation of authority at 49 CFR 1.50.

Dated: May 10, 2007.

Stephen R. Kratzke,

Associate Administrator for Rulemaking.

[FR Doc. E7-9382 Filed 5-15-07; 8:45 am]

BILLING CODE 4910-59-P

⁵ <http://www-nrd.nhtsa.dot.gov/departments/nrd-30/ncsa/sci.html>