DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 571
[Docket No. NHTSA 2007–27818]

Federal Motor Vehicle Safety Standards; Occupant Crash Protection

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

ACTION: Denial of petition for expedited rulemaking.

SUMMARY: This document denies a petition for expedited rulemaking submitted by the Smart Vision group to amend Federal Motor Vehicle Safety Standard (FMVSS) No. 208, “Occupant Crash Protection.” The petition requested that the agency add a test procedure for the Dynamic Automatic Suppression System (DASS) option under the advanced air bag options in accordance with Part 552, Subpart B.


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

SUPPLEMENTARY INFORMATION:

I. The Petition

On November 24, 2004, NHTSA received a petition for expedited rulemaking to establish a Dynamic Automatic Suppression System (DASS) test procedure, in accordance with 49 CFR Part 552, Subpart B. The petitioners, a consortium of four companies called Smart Vision, included: TRW, International Electronics Engineering (IEE), Siemens VDO and Bosch. The petitioners requested that the agency expedite adoption of their proposed test procedure for passenger side DASSs under S28.4 of FMVSS No. 208, “Occupant crash protection.” The petition further requested that the agency, pursuant to 49 CFR Part 552.13(g), establish an effective date for the procedure nine months after the submission date of the petition.

A. Initial Agency Response

On December 20, 2004,1 NHTSA responded in a letter to the petitioners that they had failed to provide certain information required for the agency to consider the petition submission to be complete. On February 15, 2005, TRW and IEE submitted the requested information, submitted a revised test procedure proposal for the agency to consider, and requested that their petitions be considered independently. TRW and IEE also informed the agency that Siemens VDO and Bosch elected not to submit the required information to complete their petitions, and were no longer participating in the Smart Vision group.

B. Proposed Test Procedure 2

The test procedure proposed by the petitioners uses a topographical representation of a Hybrid III 3-year-old test dummy 3 attached to what the petitioners describe as a thruster device. In this notice we will refer to the representation of the Hybrid III dummy as the test manikin. The thruster consists of a base plate that is placed in the right front passenger seat of the test vehicle, leveled, and secured to minimize movement. A motor is used to propel the test manikin linearly along a guided path in the base plate. The test manikin is then moved toward the automatic suppression zone (ASZ) along a horizontal, longitudinal path at a constant acceleration of 0.5 g until the DASS generates a signal indicating that the suppression zone has been breached. Three test sequences are initiated to determine a median suppression distance. Upon determination of the median suppression distance, the test manikin is moved horizontally rearward of the suppression distance, the test manikin is moved horizontally rearward of the test manikin. The test manikin is then moved toward the automatic suppression zone (ASZ) along a horizontal, longitudinal path at a constant acceleration of 0.5 g until the DASS generates a signal indicating that the suppression zone has been breached. Three test sequences are initiated to determine a median suppression distance. Upon determination of the median suppression distance, the test manikin is moved horizontally rearward of the suppression distance, the test manikin is moved horizontally rearward of the suppression zone.

2 A copy of the proposed procedure can be found in the Docket for this notice.

3 See 49 CFR part 572 Subpart P. At the option of the manufacturer, the DASS may be certified for 6-year-old compliance only by using the Hybrid III 6-year-old test dummy in 49 CFR part 572 Subpart N in place of the Hybrid III 3-year-old test dummy.

The Advanced Air Bag Rule allows for passenger side compliance through any of three different options: Low Risk Deployment (LRD), which defines a reduced deployment strength for occupants in close proximity to the air bag; suppression when a child is present, or DASS, which 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 (presence) options were specified in the Advanced Air Bag Rule. A performance test for detecting 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. Accordingly, we established very general performance requirements for DASS and a special petition and expedited rulemaking process (49 CFR Part 552 Subpart B) for consideration of procedures for testing advanced air bag systems incorporating DASS. Among the components, this expedited rulemaking process: (1) Provides a definition for DASSs, (2) Requires the petitioner to submit specific information about the operation of the DASS and a proposed test method and supporting data and analyses to complete a rulemaking, (3) Allows the agency to request additional information if the petition fails to provide any of the information, and (4) Allows the agency to request additional supporting information and a DASS demonstration at any time during consideration of the petition.

After evaluating the petition, the agency would publish either a notice proposing to adopt the test procedure (or adopt the test procedure with changes or additions), or publish a notice denying the petition. After considering those comments on a proposed procedure, we would then decide whether the procedure should become a final rule and be added to Standard No. 208. We noted in the Advanced Air Bag Rule that we intended to minimize the number of different test procedures that are adopted for DASS and to ensure

1 See Docket for this letter.
ultimately that similar DASS are tested in the same way.

III. Agency Request for Additional Information

In June 2005, the agency responded in a letter to the petitioners informing them that their petitions had been determined to be complete, would be considered simultaneously to the extent possible, and requested additional information and supporting data. The agency believed that the requested information was necessary to fully evaluate the petitions and to be able to publish a notice of proposed rulemaking (NPRM) for a DASS test procedure. The agency request for information addressed three main areas of concern: Dummy acceleration and kinematics, occupant recognition, and system latency.

A. Information Request Topics

Dummy Acceleration and Kinematics: The agency noted that the petition’s choice of a constant horizontal acceleration in the vehicle longitudinal direction and the magnitude of the selected acceleration were based on the exploration of pre-impact braking as the only pre-crash vehicle maneuver. The agency asked about the likelihood that occupants may have more complex motion than that simulated by the proposed test procedure and how pre-crash maneuvering or long-duration, low-acceleration pre-crash events might influence the occupant’s motion relative to the vehicle interior. The agency further believes that some crash events have a sufficiently long duration, allowing for significant occupant movement prior to the main deceleration event resulting in an air bag deployment decision. This was supported by event data recorder output collected from NHTSA’s Special Crash Investigation program on vehicles with Advanced Occupant Protection Systems.

Occupant Recognition: Section 14(b)(1) of 49 CFR Part 552 requires the petitioner to provide a description of the logic used by DASS to discriminate between an occupant’s torso or head entering the ASZ as compared to an occupant’s hand or arm, and whether and how the DASS discriminates between an occupant entering the ASZ and an inanimate object such as a newspaper or ball. The petitioner submitted a description of the DASS logic. However, the proposed performance test used a single topographical representation of the Hybrid III 3-year-old test dummy. The agency believes that this manikin could appear to the DASS to be an occupant, but many other real world occupants could have significantly different optical characteristics. The agency requested additional information regarding any testing that had been performed verifying the system logic, and inquired if the proposed procedure should include a metric that verifies the system’s occupant discrimination logic.

System Latency: Because there is a short delay, due to information processing and communication speed, there would be a difference between where the DASS “thinks” the occupant is located at any time and where the occupant is truly located. The agency requested additional information regarding DASS strategies for counteracting system latency errors and inquired if the proposed test procedure should include a metric with differing acceleration profiles to assess the impact of system latency on DASS performance.

B. Petitioner Response

On November 30, 2005, the petitioners responded to the agency request for additional information. The petitioners provided additional information where possible, proposed that the agency issue a Notice of Proposed Rulemaking (NPRM) to help identify recommended solutions to areas where the petitioners could not provide answers to the agency’s request for information, and requested an implementation date for the proposed test procedure of September 1, 2006.

Dummy Acceleration and Kinematics: The petitioners agreed that more complex occupant motion is possible during pre-crash maneuvering. However, the petitioners commented that the proposed test procedure was designed to capture the most common pre-crash movement in a repeatable manner and that it would not be possible to design a certification test procedure for “any” imaginable movement. The petitioners further commented that a test procedure with a pivoting movement would require development of a completely new test and would not offer any further quality to the certification procedure. The petitioners commented that they had data demonstrating the viability of the proposed 0.5g acceleration profile in the proposed test procedure, but that they did not have supporting data for increasing the acceleration for the certification test or for increasing the duration of the test.

Occupant Recognition: The petitioners commented that a separate test of the logic should not be part of the certification test procedure. Rather, the complete DASS should be tested and the logic verified through a pass or fail result of a test of the system. The petitioners acknowledged that occupant recognition logic had been individually tested through “due-care” testing, and offered to review that data with the agency separately and confidentially.

System Latency: The petitioners commented that they were not aware of any well-founded data or measurements that would allow defining a worst case acceleration. Rather, it was suggested that certification testing would cover a significant portion of real-life situations. The petitioners further commented that a DASS, when incorporated into a vehicle, would provide for any expected system latency by extending the ASZ further into the occupant compartment. It was noted that a DASS could be tailored to provide several suppression zones depending on the air bag module and the occupant characteristics.

IV. Ex Parte Meeting With Smart Vision

On September 25, 2006, the agency met with the petitioners to discuss their November 30, 2005 response. The agency informed the petitioners that in its review of the petitioner response, there remained several areas of concern. Specifically, the agency expressed concern that the petitioners did not provide any data to indicate that a DASS would operate outside of the test dummy scenario, and it is unclear what occupant accelerations and kinematics should be considered in the test procedure. It was further explained that it was unclear what the deployment risk would be with an occupant in the ASZ due to system latency, that the proposed test procedure was not fully completed and would need to be refined through the NPRM process, and that the requested implementation date of September 2006 was not realistic considering the questions that remained.

The agency also proposed a collaborative research program with the petitioners to develop data to support the proposed test procedure and allay the agency concerns. A key element of the proposed research was availability of a DASS-equipped vehicle on which to perform the required research. In separate correspondence subsequent to the September 25, 2006 meeting, the petitioners declined to participate in a cooperative research program citing a lack of availability of a DASS-equipped test vehicle and a shift in market.
demand away from advanced occupant detection systems, such as a DASS.

V. 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 may be potentially beneficial, as opposed to suppressing the air bag or relying on a low risk deployment. However, central to this idea is the availability of a test procedure that accurately describes the “real world” conditions to delineate DASS performance, regardless of the basic technology used within the suppression system. While there may be great potential benefits through use of occupant protection systems such as a DASS, there must also be robust and repeatable test protocols to assess such systems. The agency believes that the Smart Vision proposed test procedure was simply not sufficient for the agency to expedite a rulemaking that would establish the benchmark for assessment of future DASSs.

The agency continues to have interest in obtaining test data that would support development of a test procedure to assess DASSs. We welcome developers of DASS safety systems to approach the agency with proposals for collaborative research for such test procedure development. Specifically, the agency is interested in research that would address the areas of concern expressed above.

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.


Stephen R. Kratzke, Associate Administrator for Rulemaking.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), announce a 90-day finding on a petition to list *Astragalus anserinus* (Goose Creek milk-vetch) as threatened or endangered under the Endangered Species Act of 1973, as amended (Act). We find that the petition presents substantial scientific or commercial information indicating that listing *A. anserinus* may be warranted. Therefore, with the publication of this notice, we are initiating a status review of the species, and we will issue a 12-month finding to determine if listing the species is warranted. To ensure that the status review is comprehensive, we are soliciting information and data regarding this species.

DATES: The finding announced in this document was made on August 16, 2007. To be considered in the 12-month finding for this petition, data, information, and comments must be submitted to us by October 15, 2007.

ADDRESS: The complete supporting file for this finding is available for public inspection, by appointment, during normal business hours at the Snake River Fish and Wildlife Office, U.S. Fish and Wildlife Service, 1387 S. Vinnell Way, Room 368, Boise, ID 83709. Please submit any new information, materials, comments, or questions concerning this species or this finding to the address above, or via electronic mail (e-mail) at fw1srbcollection@fws.gov.

FOR FURTHER INFORMATION CONTACT: Jeff Foss, Field Supervisor, Snake River Fish and Wildlife Office (see ADDRESSES); by telephone at 208–378–5243; or by facsimile at 208–378–5262. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800–877–8339. Please include “Astragalus anserinus scientific information” in the subject line for faxes and e-mails.

SUPPLEMENTARY INFORMATION:

Public Information Solicited

When we make a finding that substantial information is presented to indicate that listing a species may be warranted, we are required to promptly commence a review of the status of the species. To ensure that the status review is complete and based on the best available scientific and commercial information, we are soliciting information on *Astragalus anserinus*. We request any additional information, comments, and suggestions from the public, other concerned governmental agencies, Native American Tribes, the scientific community, industry, agricultural, or any other interested parties concerning the status of *A. anserinus*. We are seeking information regarding the species’ historical and current status and distribution, its biology and ecology, ongoing conservation measures for the species and its habitat, and threats to the species and its habitat.

We will base our 12-month finding on a review of the best scientific and commercial information available, including all information received during the public comment period. If you wish to provide comments, you may submit your comments and materials concerning this finding to the Field Supervisor, Snake River Fish and Wildlife Office (see ADDRESSES). Please note that comments merely stating support or opposition to the actions under consideration without providing supporting information, although noted, will not be considered in making a determination, as section 4(b)(1)(A) of the Act directs that determinations as to whether any species is a threatened or endangered species shall be made “solely on the basis of the best scientific and commercial data available.” At the conclusion of the status review, we will issue the 12-month finding on the petition, as provided in section 4(b)(3)(B) of the Act.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Background

Section 4(b)(3)(A) of the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 et seq.), requires that we make a finding on whether a petition to list, delist, or reclassify a species presents substantial scientific or commercial information indicating that the petitioned action may be warranted. We are to base this finding on information provided in the petition, supporting information submitted with the petition, and information otherwise available in our files at the time we make the determination. To the maximum extent practicable, we are to make this finding within 90 days of our receipt of the petition and publish our notice of the finding promptly in the Federal Register.

Our standard for “substantial information” within the Code of Federal