



September 7, 2021

SUBMITTED VIA REGULATIONS.GOV TO DOCKET# NHTSA-2020-0067

David Jasinski, Office of the Chief Counsel
Hisham Mohamed, Office of Crash Avoidance Standards
National Highway Traffic Safety Administration (NHTSA)
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

RE: Notice of Proposed Rulemaking: Standard Reference Test Tire, 86 FR 42762, RIN 2127-AL92 (August 5, 2021).

Dear Mr. Jasinski and Mr. Mohamed:

On behalf of the U.S. Tire Manufacturers Association (USTMA), I am pleased to submit this letter commenting on the above-captioned rulemaking. As the national trade association for tire manufacturers that produce tires in the U.S., USTMA has a direct interest in this rulemaking. USTMA members operate manufacturing facilities in 17 states, employ nearly 100,000 workers and generate annual sales of more than \$27 billion. Our member companies include Bridgestone Americas, Inc.; Continental Tire the Americas, LLC; Cooper Tire & Rubber Company; Giti Tire (USA) Ltd.; The Goodyear Tire & Rubber Company; Hankook Tire America Corp.; Kumho Tire U.S.A., Inc.; Michelin North America, Inc.; Nokian Tyres Inc.; Pirelli Tire LLC; Sumitomo Rubber Industries; Toyo Tire Holdings of Americas Inc. and Yokohama Tire Corporation.

USTMA applauds NHTSA's publication of this notice proposing action to replace the current 14-inch Standard Reference Test Tire (SRTT) with the new 16-inch SRTT and ultimately no longer referencing the 14-inch SRTT in its safety standards and regulations. Updating this test tire is paramount as the new 16-inch modern tire has characteristics different from when the SRTT 14-inch test tire was introduced in the 1980s as a baseline tire "for consumer information testing, in the determination of what is a snow tire, and to evaluate testing surface friction for evaluating braking and electronic stability control performance."¹ Using the 16-inch SRTT brings the current lens of modern tire technology into focus and

¹ 86 Fed.Reg. 42762 at 42763 (August 5, 2021).

highlights the trend of using larger sized tires, modern design features and new material composition in tires. Since the 14-inch SRTT is no longer in production, time is of the essence to transition to the 16-inch SRTT.

I. General Comments

A. USTMA encourages NHTSA to expedite publication of the final rule

USTMA agrees with NHTSA that this rulemaking “is necessary because the only manufacturer of the currently referenced SRTT ceased production of the tire. Referencing a new SRTT ensures the availability of a test tire for testing purposes.”² USTMA recommends that NHTSA immediately finalize certain changes proposed in this NPRM as SRTT 14-inch production has ceased by the only manufacturer of these testing tires, and no 14-inch test tires are currently available for tire manufacturers to perform compliance tests of FMVSS. USTMA is not aware of any other suitable replacement for the 14-inch SRTT. Additionally, adopting the 16-inch SRTT will have a direct and positive effect on safety as “the changes proposed in this rule are designated to maintain the present level of stringency of NHTSA’s braking and electronic stability control FMVSS’s.”³ USTMA asks NHTSA to adopt the 16-inch SRTT immediately, not only due to the unavailability of the 14-inch SRTT but also due to the one-year SRTT age limitation for use as a Control Monitoring Tire (CMT) in the UTQGS wear test. Since the production of 14-inch SRTT ceased in late 2020, this prohibits any of these tires from being used for UTQGS wear testing after the end of this year.

Further, USTMA strongly supports NHTSA’s proposed 30-day implementation lead time for the UTQGS portion of this rulemaking, given the significant current tire industry demand for new product testing. USTMA agrees with the rationale NHTSA provides for the FMVSS portion of the proposal for a shorter lead time for implementation of a final rule than the typical 180 days to one year after publication and agrees with NHTSA that this situation represents “good cause for NHTSA to institute a shorter lead time in a final rule resulting from this proposal.” However, USTMA will defer vehicle manufacturers on the appropriateness of a six-month implementation period of the 16-inch SRTT for use the non-tire FMVSS.

² 86 Fed.Reg. 42762 at 42763 (August 5, 2021).

³ 86 Fed.Reg. 42762 at 42769 (August 5, 2021).

Today, tire manufacturers are being directly impacted because of their inability to test new products for the marketplace. USTMA members report current delays in UTQG testing for new product releases, since 14-inch SRTTs are no longer available. With a delay in tire development testing, it is likely that new product introductions will likewise be delayed. A swift resolution to this issue is necessary as business plans are typically developed well in advance, and delays of this nature ultimately affect profitability of tire manufacturers.

B. NHTSA should incorporate the reference to ASTM F2493 without a revision date, since only SRTT available is the current version

USTMA recommends that all NHTSA regulations (both UTQG and all FMVSS) refer to ASTM F2493 without a revision date and recognize that all SRTTs meeting applicable storage requirements can be used for testing. For UTQG testing, USTMA recommends that NHTSA allow all SRTT versions to be used within “no more than one year old at the commencement of the test and must be used within two months after removal from storage.”⁴ For FMVSS testing for snow tire performance, USTMA recommends that NHTSA adopt the storage requirements provided in ASTM F1805 – 20, which allow for climate-controlled storage of an SRTT for up to two years, consistent with the Canadian regulatory provisions provided below.

According to ASTM, any version of the F2493 SRTT would be demonstrated to have equivalent test performance. If an SRTT is developed that does not have equivalent performance, a new ASTM standard would be developed, as was the case with the transition from the 14” SRTT (ASTM E1136) to the 16” SRTT (ASTM F2493). For example, ASTM F1805-20 does not refer to a specific version of ASTM F2493, since ASTM recognizes that the only version of any reference tire available for purchase and testing use is the current revision date. The NPRM refers to the 2019 version of ASTM F2493. We would urge NHTSA to refer to the F2493 without a date reference (recognizing applicable storage requirements), since the current SRTT is the only version available for purchase and testing at any given time.

Other standards and regulatory bodies have recognized that in the case of reference tires, the revision date does not reflect substantive changes affecting tire performance, but instead reflects administrative

⁴ 49 CFR § 575.104, note to paragraph (E)(2)(IX)(C).

ASTM procedures. In fact, recognizing that tire performance is not affected by a standard's revision date and minimizing SRTT waste, Canada was the first country to adopt ASTM 2493 without a revision date. In its recent amendments to the Canadian Motor Vehicle Safety Regulations, paragraph 5(4)(a) was replaced by the following text (red color and underline added):

“(a) meets one of the following snow traction requirements:

(i) when tested using the snow traction test described in ASTM F1805 - 06, *Standard Test Method for Single Wheel Driving Traction in a Straight Line on Snow- and Ice-Covered Surfaces*, with medium pack snow and a test load equal to 74% of the test inflation rated load described in that test method, attains a traction index equal to or greater than 110 compared to a standard reference test tire that meets the requirements of ASTM E1136 - 10, *Standard Specification for P195/75R14 Radial Standard Reference Test Tire*; or

(ii) when tested using the snow traction test described in ASTM F1805 - 20, *Standard Test Method for Single Wheel Driving Traction in a Straight Line on Snow- and Ice-Covered Surfaces*, with medium pack snow and a test load equal to 74% of the test inflation rated load described in that test method, attains a traction index equal to or greater than 112 compared to a standard reference test tire that meets the requirements of any version of ASTM F2493, *Standard Specification for P225/60R16 97S Radial Standard Reference Test Tire*, in effect within the less-than-two-year period referred to in section 9.1 of ASTM F1805 - 20;”⁵

The UN has recognized that references SRTT standards do not need to contain a revision date. In Global Technical Regulation No. 16 (the Tyre GTR), five ASTM reference tires are incorporated by reference, including E1136, F2493, F2872, F2871 and F2870.⁶ None of these references contain a revision date. As well, in UN Regulation No. 117, Rev. 4, Amend. 3, the UN agreed to amend paragraph 2.18 to include reference to the same five ASTM SRTTs and listed them without revision dates.⁷

⁵ Regulations Amending Certain Regulations Made Under the Motor Vehicle Safety Act, P.C.2021-305, 19 April, 2021, SOR/2021-83, Canada Gazette, Part II, vol.155, no. 9, April 19, 2021. <https://canadagazette.gc.ca/rp-pr/p2/2021/2021-04-28/html/sor-dors83-eng.html>.

⁶ United Nations Global Technical Regulation No. 16 (United Nations Global Technical Regulation on Tyres), Amendment 2, Section 2.82 (9 October 2020), <https://unece.org/fileadmin/DAM/trans/main/wp29/wp29wgs/wp29gen/wp29registry/ECE-TRANS-180a16am2e.pdf>.

⁷ UN Regulation No. 117, Revision 4 – Amendment 3, 25 September 2020, amendment to Section 2.18. <https://unece.org/fileadmin/DAM/trans/main/wp29/wp29regs/2020/R117r4am3e.pdf>.

II. Snow tire definition

A. USTMA supports NHTSA’s proposal to change the minimum snow traction index from 110 to 112 using the 16” SRTT

USTMA appreciates that NHTSA coordinated with the Tire and Rubber Association of Canada, and the ASTM International Committee F09 on tires and E17 on vehicle pavement systems to determine the consequences of replacing the 14-inch SRTT with the 16-inch SRTT as it relates to the surface friction measurement and the snow tire definition. As NHTSA mentioned in the NPRM, USTMA recently funded a study commissioned by the ASTM F09 Committee on Tires that used winter test season data from 2016 through 2018 to determine whether the 16-inch SRTT meets the definition of a “snow tire.” USTMA advocates for using a minimum traction index of 112 when tested using the updated F1805-20 test method and using the 16-inch SRTT to determine whether a tire meets the definition of “snow tire,” consistent with the findings of the ASTM/USTMA study.

B. USTMA agrees with NHTSA’s proposal to define snow performance in FMVSS 139 as “medium pack snow.”

USTMA supports NHTSA’s interpretation that “the ‘medium pack snow’ condition was intended for use by manufacturers for marketing tires as ‘snow tires’”.⁸ Furthermore, as NHTSA notes, this interpretation is consistent with the UN Regulation No. 117 specification for use of the Alpine (Three-Peak Mountain Snowflake) symbol. NHTSA should incorporate ASTM standard F2493 without a revision date.

C. Typographical errors noted in this section

USTMA also noted a typographical error in this section of the NPRM. The F1805 test is incorrectly referred to as “F1895” on page 42765, right column, under the chart. The sentence should read: “Accordingly, NHTSA is proposing to amend the definition of ‘snow tire’ in FMVSS No. 139 to specify that a snow tire is a tire that attains a traction index of 112 when tested using the updated **F1805** test method using the 16-inch SRTT (emphasis added).”

⁸ 86 FR 42,766

III. USTMA agrees with NHTSA's proposal on Surface Friction Measurement

USTMA encourages NHTSA to adopt the ASTM E1337-19 test method for Surface Friction Measurement with the PFC values derived from its correlation formula between the E1136 (14-inch SRTT) and the F2493 (16-inch SRTT) as shown in the table of Section A.1 of the NPRM.

IV. NHTSA's Proposed UTQGS Amendments

A. USTMA supports NHTSA proposal for a base-course wear rate (BCWR) conversion factor based on the 17 quarters of NHTSA testing

USTMA supports a conversion factor of 1.324 based on the ratio of the BCWR using the 14-inch SRTT to the BCWR using the 16-inch SRTT measured over all 17 quarters of testing. NHTSA's 17 quarters of data represents varying degrees of changes in seasons, temperature, humidity and road surface. The proposed method of correction for the BCWR follows what Michelin recommended in 2017. Since then, NHTSA has accumulated many more quarters of data, and USTMA supports using all that data to define the correlation factor. USTMA appreciates that NHTSA developed other options for consideration, however, USTMA agrees that using the entire dataset yields the most representative conversion factor, so we are not providing comments on the other options at this time.

USTMA would like to bring attention to typographical errors in this section of the NPRM:

- There are 17 total quarters of data that is used to determine the BCWR. Page 42766, third column, second full paragraph, first sentence references 14 consecutive quarters of data. The sentence should read: "NHTSA now has 17 consecutive quarters of testing data (emphasis added)."
- The average BCWR wear rate using the 16-inch SRTT is 5.977. Page 42767, third column under Table 1 reference a BCWR wear rate of 5.942. The sentence should read: "The average BCWR wear rate using the 16-inch SRTT is 5.977. Dividing 7.911 by 5.977 results in a conversion factor of 1.324 (emphasis added)."

B. Storage of SRTT-16

1. USTMA recommends that NHTSA adopt a definition of "storage" for the SRTT consistent ASTM storage recommendations

NHTSA is seeking comments on a “storage” definition that would minimize testing variability without providing inflexible limitations on NHTSA’s use of the SRTT. USTMA recommends adopting temperature -controlled storage of the SRTT as per the ASTM guidelines. ASTM F2493 requires the following storage of SRTTs:

“11. Storage and Preservation

11.1 The tires shall be stored under constant relative humidity conditions at a temperature not to exceed 70°F (21°C) and above freezing. The ozone level in the storage area shall not exceed 5 parts/108 (or 5 MPa partial pressure), and no tires shall be stored within 30 ft (9.1 m) of electrical motors or other ozone-generating equipment. Storage of the tires shall be in subdued light, with the tires stacked unbundled, no more than eight tires high on a pallet.”⁹

USTMA does not support increasing the time an SRTT can be removed from storage from two to four months, due to the increase test variability this increase would cause. However, USTMA understands NHTSA’s need for flexibility and is willing to discuss options with NHTSA. We ask that NHTSA sever this storage topic from the move to the 16-inch SRTT, due to the critical need to adopt the new SRTT, and address the storage topic on separate longer term track. We also understand that NHTSA has had issues with obtaining 14-inch SRTTs in the past. We are assured that supply of the 16-inch SRTT will be reliable and that NHTSA will not have similar supply challenges in the future. Michelin is providing additional comments on this point, and hopefully NHTSA and Michelin can coordinate on this topic.

Accordingly, in a Federal Register notice, NHTSA referenced a study on treadwear degradation for tire storage in non-temperature controlled areas. “Although the rate of treadwear degradation due to aging is not an exact science, our experience has been that tires stored outside the cave degrade at approximately 10 percent per year, while tires stored under the controlled climatic conditions of the cave degrade at a significantly lower rate, no more than a nominal 5 percent.”¹⁰

C. USTMA supports NHTSA’s proposal to reference the UTQGS circuit instead of total distance in mileage

⁹ ASTM Standard F2493, 2020, “Standard Specification for P225/60R16 97S Radial Standard Reference Test Tire,” ASTM International, West Conshohocken, PA, 2003, DOI: 10.1520/F2493-20, www.astm.org.

¹⁰ 65 FR 33484

USTMA understands and agrees with NHTSA's proposal to amend 575.104 to modify language in the treadwear test procedure to reference the total distance and schedule of events in terms of circuits completed rather than mileage since unforeseen road work or detours could change test values slightly. USTMA agrees that completing the circuit is the critical point, and small differences in mileage due to road conditions or events should not materially alter test results.

Again, we appreciate that the Agency has published this notice of proposed rulemaking to move forward with the 16-inch SRTT for compliance testing which is more similar to the modern tires on the market today. Thank you for the opportunity to provide these comments. Should you have any questions or require further information, please contact me at 202-682-4839 or tnorberg@ustires.org.

Sincerely,

A handwritten signature in black ink that reads "Tracey Norberg." The signature is written in a cursive, flowing style.

Tracey Norberg
Senior Vice President & General Counsel
U.S. Tire Manufacturers Association