

Informal Document No. 13

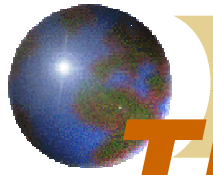
54th GRRF, 6-8 October 2003

Agenda Item 6.

Status of tire rulemaking actions



Submission by the United States of America for information on the status of the various tire rulemaking actions



TREAD ACT

- ❖ **HR 5164 signed into law on November 1, 2000**
- ❖ **Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act**
- ❖ **3 Sections relate to tire performance items**



New Tire Regulation

FMVSS 139

- ❁ **Final Rule published June 26, 2003**
 - ❁ **(Docket No. 15400)**
- ❁ **Light Vehicle Standard for vehicles up to 10,000 lbs GVWR**
 - ❁ **High Speed test: *Upgraded***
 - ❁ **Endurance test: *Upgraded***
 - ❁ **Low Pressure Performance test: *New***
 - ❁ **Bead Unseating test: *Unchanged***
 - ❁ **Strength test: *Unchanged***
 - ❁ **Aging Effects test: *Delayed***



Highlights of Final Rule

Applicability

- Applies to new pneumatic radial tires for use on motor vehicles with a GVWR of 10,000 pounds (4,536 kg) or less
- Applicable tires: Passenger Car tires and Light Truck tires with load ranges C, D, and E; also includes snow tires and other deep tread tires
- Bias ply tires, 8-12 rim diameter and other small trailer tires remain under FMVSS 109 or FMVSS 119
- Effective date: June 1, 2007



Highlights of Final Rule

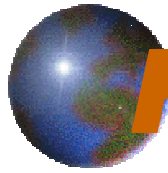
High Speed Test

- ⊕ Purpose: To evaluate tire performance during high speed operation
- ⊕ Upgrade: Mainly through higher test speed
- ⊕ Test Parameters
 - ⊞ **Speed: 140/150/160 km/h**
 - ⊞ **Inflation Pressure: 220 kPa for P-metric; higher inflation pressures for LT tires**
 - ⊞ **Load: 85% of maximum load rating**
 - ⊞ **Duration: 30 minutes at each speed step**
Ambient: 38°C



Highlights of Final Rule Endurance Test

- **Purpose: To evaluate tire performance for an extended duration**
- **Upgrade: Mainly through higher test speed**
- **Test Parameters**
 - **Test Speed: 120 km/h**
 - **Inflation Pressure: 180 kPa for P-metric tires; higher pressures for LT tires**
 - **Test Load: 85/90/100% of maximum**
 - **Duration: 4/6/24 hours (Total 34 hours)**
 - **Ambient: 38°C**



Highlights of Final Rule

Low Pressure Test

- **Purpose: To evaluate tire performance at TPMS low pressure threshold**
- **New Requirement**
- **Test Parameters**
 - **Use same tire that completed Endurance test**
 - **Test Speed: 120 km/h**
 - **Inflation Pressure: 140 kPa for P-metric tires; higher inflation pressures for LT tires**
 - **Test Load: 100% of the maximum load rating**
 - **Duration: 90minutes**
 - **Ambient: 38°C**



Highlights of Final Rule Bead Unseating Test

- **Purpose: To evaluate tire resistance to bead becoming unseated from the rim during severe vehicle maneuvers**
- **Test is unchanged from FMVSS 109 for passenger car tires and has been extended to light truck tires**
- **Agency plans to conduct research for a new or revised test**



Highlights of Final Rule Strength Test

- ❖ **Purpose: To evaluate tire impacting a road hazard**
- ❖ **Test is unchanged for passenger car and light truck tires. Requirements adopted from FMVSS 109 for passenger car tires and FMVSS 119 for light truck tires**
- ❖ **Agency plans to conduct research for a new or revised test**



Highlights of Final Rule

Aging Effects Test

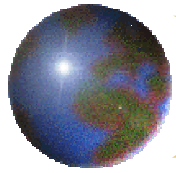
- ❖ **Purpose: To evaluate tire performance as a result of aging**
- ❖ **Agency delayed adoption of tire aging requirements due to lack of time to complete research**
- ❖ **Research is continuing and will focus on oven aging and long-term durability endurance tests**
- ❖ **NPRM on aging expected to be published 2 years after final rule**



SUMMARY

❖ Next Steps

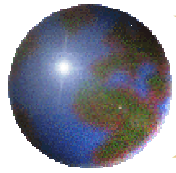
- ❑ Petition for Reconsideration closed August 11, 2003**
- ❑ Currently reviewing 7 petitions for reconsideration**
- ❑ Main issues of petitions: 1) reduced stringency for light truck tires; 2) applicability; and 3) exemption for specialty tires**
- ❑ Agency to decide on these issues and will publish response to petitions in the Federal Register**



Status of TPMS Rulemaking

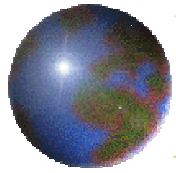
⊕ TPMS (Docket 8572)

- ⊕ Final Rule published June 5, 2002**
- ⊕ 13 Petitions for reconsideration received**
- ⊕ Main issues: 1) replacement tire; 2) road test conditions for warning lamp activation**
- ⊕ Consumer Groups sued Agency to prevent use of 1-tire, 30% under-inflated TPMS**
- ⊕ U.S. Court of Appeals invalidated final rule and mandated new final rule having 4-tire, 25% under-inflated system**



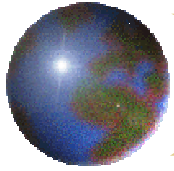
Next Steps for TPMS Rulemaking

- ❖ Special Order issued to Vehicle Manufacturers and TPMS Suppliers in September 2003 requesting information on production capacity and TPMS development plans
- ❖ Information will help agency decide on new effective dates to comply with Court ruling
- ❖ New final rule is expected to be issued early 2004



Status of Tire Labeling Rulemaking

- **Tire Labeling (Docket 11157 & 13678)**
 - Final Rule published November 18, 2002
 - 7 Petitions for reconsideration received
 - Review and Approval process almost completed
 - Final Rule – response to petitions for reconsideration will be published after review/approval process



Heavy Truck Tire Research

- **Heavy Truck Tire Research (Docket 13707)**
 - **TREAD Act requires NHTSA to upgrade FMVSS 119**
 - **Research initiated on endurance and high speed performance of new and retreaded tires**
 - **Currently, retreaded tires for heavy vehicles are not required to comply with any performance requirements**
 - **Test matrix evaluates tire performance at different speeds, inflation pressures, loads and duration.**
 - **Phase I testing completed in September 2003; Phase II to begin in late-November**
 - **Based on test results, NHTSA will make decision on whether to proceed with rulemaking**