TMA-DC

<u>Technical and Regulatory Affairs, Safety Report</u> August 24 – August 31, 2007 C. Tinto, VP





<u>ES350 Floor Mat Investigation</u> – TMA received a call from the head of the NHTSA Enforcement office, explaining that NHTSA may now believe that the complaints of jamming of the mat in the pedal may also somehow relate to pedal/floorpan design, allegedly making the pedal more sensitive to mat placement and interference. Therefore, the agency is considering further action from Toyota. Since this is a completely new theory from the agency, we have requested a meeting with the NHTSA engineers for sometime next week to hear the background on their analysis, for further discussion on next steps within TMC.

Regulatory/Voluntary Standards

- <u>Roof Crush, FMVSS 216</u> NHTSA informed the Alliance that an SNPRM would be issued by the end of this year in it, the agency will seek comments on a 'double platen' loading test, where the platen is used to crush the roof on one side of the vehicle, then used to crush the roof on the other side. The WG requested that Alliance staff contact NHTSA to determine the test procedure the agency has been using in its research, in order for Alliance members to decide whether any OEM testing will be needed in response to the SNPRM.
- <u>FMVSS 214 Final Rule Rumored to be Coming Soon</u>—Reports suggest that the FMVSS 214 side impact upgrade final rule has been cleared by the Office of Management and Budget, and is set to be released by Sept. 28. It is also reported that NHTSA Administrator Nason confirmed in a recent interview that the new standards would be released next month.
- <u>Compatibility: VW Proposes Quasistatic Measurement</u> The Front-to-Front TWG continued reviewing data and conclusions from LCW testing in an urgent attempt to propose a dynamic barrier test to measure primary and secondary structure height to the EVC (and eventually NHTSA). VW proposed a quasistatic load measure of critical loads in the Part 581 bumper zone as a simple alternative to dynamic testing, which is under serious consideration. The TWG will meet again next week to discussion further.
- TMA Drafts Comments on NHTSA's Proposed LATCH Message After receiving feedback from TMC and TMS, TMA drafted comments, as a basis for potential Alliance comments, regarding the proposed 'LATCH Awareness Message' (NHTSA Docket No. 2007-28934). In them, we propose that the message be changed to read: "The current generation of child safety;" along with modifications to the graphic to improve the display of the lower anchor, and to utilize ISO anchor symbols. Comments are due Aug 30, 2007, so we anticipate an Alliance meeting soon to discuss this issue.
- <u>TMC Questions Related to ESC Carry-Forward Credits, FMVSS 126</u>— TMA-DC is working with TMC on questions that may impact Toyota's accrual of carry-forward credits, which focus on certain real-world scenarios, and whether these situations constitute a "malfunction". TMA-DC is investigating these issues and is working to get quick responses, as this may affect early phase-in percentages for the ESC rule.
- <u>Alliance WG on ESC, FMVSS 126 Petition</u>— NHTSA requested recommended language on the '4x4 Low' issue, and whether 20 km/h would suffice for a low-speed threshold. The Alliance WG held a meeting where member companies agreed to consider 20 km/h as a low speed threshold, and Ford volunteered to develop 4x4 Low language, including an exemption for engagement of center locking differentials. The language for both of these should be submitted by the end of next week.
- <u>NHTSA's Open Petitions</u> TMA continues to push for responses to outstanding petitions, and is working with the Alliance, and our NHTSA contacts, to get some indication of the direction of FMVSS 101, 118 and the EDR final rule. We have received some important preliminary information (which has been shared with TMC GA), but the timing of NHTSA's responses undecided. However, we have also heard that NHTSA counsel recently circulated internal memos inside the agency urging final responses to several of our key priorities.

Enforcement/Recalls/Compliance/Assessments

• <u>2008 MY Rollover NCAP Vehicles Selected</u> - TMA learned of the vehicles selected for NHTSA's rollover NCAP testing for the '08 MY. The vehicles are: Highlander FWD, AWD, and Hybrid, Sienna AWD, Sequoia FWD and AWD, and Scion xB. Test dates are not yet available, but should be within the next few months.

Other

- <u>Advanced Crash Avoidance Technology (ACAT) Research Project</u> The Toyota ACAT team held its biweekly meeting with NHTSA, and agreed to hold video conferences with TMC every 6 weeks, with continued bi-weekly conference calls between TMA and NHTSA. NHTSA also asked whether Toyota might be able to complete the project earlier than projected by the contract end date (November 2009), in order for the agency to begin analyzing all of the ACAT projects together (Toyota's ACAT project is on the longest timeline). However, TMC believes they will need the entire contract period to finish its work.
- <u>VII Viability Decision Under Debate</u> The VII viability decision criteria and timing continue to be under debate between the VII-C and DOT. The newly formed 'Viability Task Force', under the National VII Coalition, has drafted a high-level criteria document based on DOT's decision timing of March 2008, however, the VIIC, which has been developing its own viability criteria, expressed strong opposition to both the Task Force criteria and DOT's timing, so it seems unlikely that the VII-C and DOT will come to an agreement anytime soon. Toyota is maintaining its distance from the discussion, since we believe the issue should be led by DOT, which contradicts VII-C's position.
- <u>SAE Hybrid Quiet Car Working Group</u> TMA has heard that SAE had formed a new WG to address the quiet car issue, and has urged TMC to consider an appropriate member from Toyota. The issue stems from complaints from sight-impaired persons that these vehicles are difficult to detect due to their lack of noise when operating in electric mode. We have contacted SAE for application information, and are working with TMC on potential membership.
- <u>TMC Sponsored Research: Upcoming Video Meeting with Virginia Tech</u> TMA-DC confirmed agenda items for the August 27th meeting next week between TMC and VT to discuss the results and implications from the recently completed research project on "Pelvic and Thoracic Injury Biomechanics in Side Impact." In addition, VT plans to brief TMC on the status of its current research on "Thoracic Internal Organ Injury."
- <u>Manufacturers' Briefing Conference on Child Injury Announced</u> The Annual Manufacturers' Briefing Conference on child injury research, organized by the Children's Hospital of Philadelphia (CHOP), will take place on December 7, 2007 in Farmington Hills, MI. Topics presented this year will include: belt-restrained children in side impact crashes, child interaction with airbags, LATCH, causes of child death in FARS, and others. Registration materials to arrive via email in September and will be circulated by TMA.
 - On August 28th, TMA and TTC attended the Tundra IIHS Side Impact Test, which Toyota voluntarily requested as a 'Top Safety Picks' candidate. The test went well, no functional problem was observed. All the injury numbers for both front and rear dummy were "Good", and based on a quick look at the video footage, IIHS commented there appear to be no anomalies with regards to the dummies' kinematics. The intrusion measurement was also "Good".
 - Based on the preliminary results, we expect that the Tundra will receive a "Good" for this side impact test, thus in combination with its "Good" results for the frontal test and the rear impact test, this test makes it available to receive a "Top Safety Picks (TSP)" Award. Regarding the release date of the test results, the 2008 TSP Award is scheduled to be announced in mid-November. Before this announcement, IIHS mentioned that they will start posting the results on their website as soon as the results are approved within IIHS, which they expect in about three weeks.
 - NHTSA Pushing for Further Action on ES Floor Mat Issue - I received a call from the head of NHTSA Enforcement today. Basically, there were some internal NHTSA briefings today regarding the ES350 floor mat/throttle sticking issue -- including Toyota's actions to date, NHTSA internal investigation and analysis, complaints, etc. -- and apparently NHTSA management has decided to demand further action from Toyota. They are requesting a meeting ASAP to discuss their investigation and their ideas for further action.

- Tundra IIHS Side Impact Test Rated "Good" IIHS tested Tundra, and preliminary results indicate a "Good" score, which means that coupled with its "Good" ratings for Front and rear testing, the Tundra is will be a candidate for IIHS's "Top Safety Pick" designation. The 2008 TSP Award is scheduled to be announced in mid-November. But before this announcement, IIHS said they may post it on their website as soon as the results are approved within IIHS, which they expect in about three weeks. We are staying on top of it and will inform TMS etc when it becomes 'public'. This entire effort was a result of TMA-DCs very strong push to IIHS (up to the President) to get PU trucks tested they had originally no plan to do so this year at all, but we pushed hard to get the Tundra recognition for its safety advances IIHS finally agreed, inviting other makes to be tested as well. We also were able to convince IIHS to test a 2007 model (vs their request for '08s only) to get this done more quickly. Finally FYI - fact is that the IIHS test series is much more severe than NHTSA's NCAP testing. (I know its tough to say this publicly, and it doesn't negate the 4 star rating, but JFYI).
- <u>TMA-TTC Joint ITS Project</u> TMA met TTC and its consultant The Transport Group to discuss next steps for the joint ITS project. The objective of the project is to provide a comprehensive overview of the U.S. ITS trends with TMC by developing one-page executive summaries of various federal-funded ITS initiatives, including VII, CICAS and IVBSS. We will complete the first draft report by September 21 and have face-to-face meetings with TMC related departments in the end of September.
- FCC Issues Public Notice on 700 MHz FCC issued a public notice to officially set the date for 700 MHz auction to be on January 16, 2008. The Notice also seeks for comments on auction's competitive bidding procedures delineated in the second Report and Order. As 700MHz covers a range of 15 km (e.g. 300m for 5.9GHz), it can be a strong candidate for the use of real-time traffic information, and stakeholders in the U.S., including OEMs, are paying close attention to the development of the 700MHz. The Congressional DTV Act mandates complete transition from analogue to digital by February 17, 2009 in the 700MHz spectrum.

• Compatibility:

- GM/Toyota Cooperative Research; New Timeline for Offset Barrier Evaluation GM and Toyota discussed a new research direction to consider the offset moveable deformable barrier (MDB) under development by TMC. As previously reported, cooperative development of a full width MDB resulted in a lack of ability to fully represent critical features of a vehicle-to-vehicle impact, and was therefore closed. A new offset MDB evaluation timeline will be finalized including research milestones and final targets.
- FtF TWG Considers Three Main Proposals for Phase 1 Measurement Test The Front-to-Front Technical Working Group (FtF TWG) is considering three proposals for a measurement procedure for the static requirement of Phase 1 (structure within the Part 581 bumper zone): 1) GM proposal to maintain the static requirement and add a full width rigid barrier test to measure primary structure height, 2) Honda proposal for a full width deformable barrier test measuring maximum loads in load cell rows 3 & 4, and 3) VW proposal for a quasistatic load measure of critical loads in the zone. GM, Honda, and VW will draft detailed procedures to accompany their proposals for TWG review and comment. The next TWG meeting will be scheduled as soon as the proposals are circulated. The Enhanced Vehicle-to-Vehicle Crash Compatibility (EVC) management committee meeting will be scheduled pending a TWG final recommendation.
- CRS Issues: Alliance WG Discusses LATCH Message; No Consensus to Form Alliance Comment—
 The Alliance LATCH WG discussed individual OEM concerns/questions about the NHTSA proposed LATCH Awareness Message, as announced in the August 17, 2007 Federal Register, and whether to formulate and submit Alliance comments. There was no consensus amongst member companies to formulate Alliance comments; the Toyota draft comments were not fully supported by all members.
 TMA-DC will determine next week whether to file Toyota-only comments.

- TMC Sponsored Research: Virginia Tech and TMC Discuss Results and Conclusions of Pelvic and Thoracic Research VT, TMC and TMA discussed the results and conclusions from the "Pelvic and Thoracic Injury Biomechanics in Side Impact" research project. Under the impact conditions prescribed in the test method, VT concluded that the human arm provides protection to the thorax when the arm is aligned with the rib cage. This conclusion could be beneficial in understanding and improving dummy arm/thorax designs that are specific to side impact protection and vehicle evaluation. VT also discussed data analysis tasks of its current research on "Thoracic Internal Organ Injury"; a meeting is planned during the October 2007 Stapp Car Crash conference to discuss interim project conclusions.
- TMA Attends Alcohol Ignition Interlock Symposium The 8th Annual Ignition Interlock Symposium was held in Seattle, WA in conjunction with the International Council on Alcohol, Drugs, and Traffic Safety (ICADTS), which meets every 3 years. Participation included 900+ attendees from 50+ countries. Presentation topics included current and future interlock technology, interlock programs for drunk driving offenders, and plans for

NHTSA/industry cooperative research (of which Toyota is a sponsor) to develop fleet-wide interlock technology, foster mass public acceptance, and recommend policy.

- <u>CIREN: Toyota Completes EDR Readout at the Request of Wake Forest University</u> In response to a special request from Wake Forest University (WFU), Toyota completed readouts of the EDR data recorded in two subject vehicles for research and development activities related to the WFU CIREN program. With reference to the conditions for the treatment of the prototype data, TMA-DC sent the Prototype Readout Tool Reports to WFU and will brief WFU on Toyota's initial analysis.
- <u>SafetyBeltSafe Comments to NHTSA on LATCH Educational Messages</u> SafetyBeltSafe U.S.A. strongly recommends that NHTSA consider dividing the campaigns for tether usage & understanding lower anchors. A strong, clear campaign to increase tether use should be conducted & whatever is done should grow out of the essence of the message.
- Rollover tests show '07 SUVs gained stability Many new SUVs, equipped with anti-rollover technology, are less of a risk for rollover crashes than their predecessors, according to NHTSA testing. 78 2007 model year SUVs received a 4-star rating in the rollover tests. Test results were carried over for vehicles unchanged from the previous model year.
- New Rules for Cars Took Effect Saturday Including posting government crash-test ratings on window stickers & installing a system to monitor tires on all 2008 vehicles. Saturday also marks the first requirement for automakers to install side air bags & people will see much lower fuel economy estimates for 2008 vehicles on the stickers as well.
- Upon further discussion, Dan Smith explained the following:
- They claim that this remains a serious issue, even subsequent to our mailings to Lexus owners;
- They recognize that this is a misuse issue (stacked mats), however, they believe that something about the throttle pedal or floorpan design lends itself to easier jamming than other models produced in the past;
- They also believe that the Prius, Camry and Avalon may also be prone to being overly sensitive to floor mat jamming and claim to have some evidence of such;
- They claim that jamming can occur with Toyota mats or aftermarket mats;
- They claim that the issue is further complicated by the fact that NHTSA believes that customers do not know how to shut off the car when in motion (i.e. hold the start button for 3 seconds).
- NHTSA said that they feel that this is so important/urgent that they are considering a NHTSA public service announcement, informing the public to insure they install the mats correctly (i.e. proper clip use, and no stacking) as well as how to shut off the vehicle with the push button start.
- In response, I proposed to NHTSA that we first have an informal meeting with their engineers, to get a 'download' of the information they have, as well as their analysis of pedal geometry, etc. I explained that in fact, all of these theories about design issues (vs. mat placement) are completely new to Toyota,

and therefore a meeting of senior management would be essentially fruitless and premature at this point, as we can not possibly provide any meaningful feedback to their demands until we have a better understanding of what they think the issues may be. Afterwards, we can digest the information, and set up some follow up meetings with NHTSA to discuss potential next steps, if any are deemed necessary.

- Regarding their consideration of a NHTSA public safety announcement, they agreed to send a draft to us prior to its issuance. At this point, no decisions are made, but this remains an option for them, based on what Toyota is or is not willing to do.
- Therefore, TMA's game plan is as follows:
- TMA will contact NHTSA engineers for further background tomorrow.
- 2) TMA will set up a meeting between our guys in DC (i.e. Santucci and Ro) and NHTSA engineers (Quandt and Yon) for sometime late next week, preferably in the TMA-DC offices. Our plan is that no senior staff or attorneys will be present. However, if they insist on a larger meeting, we will have Erika Jones (outside counsel) attend on our behalf. I will not attend, to insure that NHTSA does not try to negotiate any next steps at this phase.
- TMA will forward all information from this meeting to TMC for consideration and comments.
- 4) Depending on feedback from TMC, and NHTSA's sense of urgency, we will shoot for a larger meeting between NHTSA and Toyota (TMA, TMC engineers, and TMS) for the second or third week of September.

We will keep everyone informed as things progress.