



RECREATIONAL
OFF-HIGHWAY
VEHICLE
ASSOCIATION

October 26, 2010

Via E-Mail

Mark Kumagai
U.S. Consumer Product Safety Commission
4330 East-West Highway
Bethesda, MD 20814

RE: Follow-Up to October 7 Meeting

Dear Mark:

It was a pleasure meeting with you and the other staff members on October 7. As you suggested at that meeting, ROHVA is submitting a supplemental presentation by Dynamic Research, Inc. (DRI) with additional details regarding its proposed ROV Rollover Resistance Test and rationale (see attached). Please let us know if you have any questions or if any additional information would be of assistance to the Commission and/or staff.

ROHVA also very much appreciated the opportunity to engage in an open dialogue with staff members and the Commission's two consultants, Greg Schultz and Gary Heydinger. This was an important and productive exchange, which from ROHVA's perspective illustrated the difficulty of transferring terminology, tests, and assumptions from on-highway vehicles and surfaces to off-highway vehicles and surfaces. ROHVA believes that the standards development process would benefit if these discussions continue, and we will follow up with a request to schedule additional public meetings.

Having had the opportunity to reflect further on some of the questions that were asked and the issues that were raised, we would also like to take this opportunity to further respond as part of the record. Our purpose and intent in presenting the ROV Rollover Resistance test ("RRR") was to directly address an issue we understood to be the primary focus of the ANPR – low speed rollovers. It was, for this reason, that we asked DRI to design a repeatable and reproducible test that focused solely on this issue and evaluated this specific metric. Many of the questions and comments focused on other issues such as oversteer and understeer, which the staff has suggested are precursors or proxy metrics for rollover resistance. ROHVA continues to see these as separate issues regarding directional control unless or until there is data suggesting a significant correlation to rollover incidents. If the Commission, staff or the consultants has any such data or other information, we would appreciate the opportunity to review and comment.

You mentioned that staff is still looking at vehicle oversteer and understeer and believes that oversteer in a ROV could lead to unpredictable handling and a loss of control or rollover. ROHVA believes that its proposed RRR, which directly addresses rollover resistance, is a superior means of addressing low-speed rollovers rather than assuming that vehicle oversteer is correlated with or a proxy for rollovers. During our prior meeting in December 2009, CPSC staff acknowledged to ROHVA that they were unaware of any data supporting this assumption. In a prior presentation to the Chair, ROHVA also presented data

and test results showing the significant variability in measurements of a vehicle understeer or oversteer gradient and demonstrating that measuring a vehicle's understeer or oversteer gradient on asphalt had no correlation to the same measurement on off-highway surfaces. Enclosed, for your reference, is a copy of our July 2010 presentation. Again, if the Commission, staff, or the consultants has data or other information supporting this assumption, ROHVA would appreciate the opportunity to review and comment.

During the course of our meeting, several questions were asked about the use of ROVs on paved roads or asphalt surfaces. As we explained, ROVs are not recommended for this use, and all ROHVA members currently warn against such use with warnings both on the vehicles and in the owner's manuals. Moreover, operation of ROVs on public streets and highways is illegal in most states. Our review of completed IDIs indicates that only 6% of the incidents involved a lateral rollover (and not a collision with another vehicle or object) where the vehicle was being driven on a paved road or asphalt surface. In only one of these incidents was the victim wearing a seatbelt or helmet. Given all of these facts, ROHVA believes it would be inappropriate, and likely to lead to unintended consequences, such as compromised off-highway path following, if a pass/fail criterion intended to evaluate dynamic performance, as opposed to rollover resistance, on paved surfaces were incorporated into the standard.

There were several questions about the fact that ROHVA proposed a dynamic stability test that would be conducted on asphalt. It appeared these questions were asked, at least in part, due to ROHVA's previous criticisms of on-asphalt testing for off-highway vehicles. First, as explained, dynamic testing of ROVs most appropriately would occur on a suitable off-highway testing surface, since the vehicles are designed and intended to be operated off-highway. Unfortunately, such a surface does not presently exist that gives reasonably repeatable results. Rather than wait for such a surface to be created, ROHVA has decided to develop a test that both evaluates the primary issue – low speed rollover – and also minimizes the adverse effects of testing ROVs on asphalt and the data generated by the test. The RRR may be reliably conducted on asphalt because of the nature of the test – a slow speed, fixed steering test focused solely on rollover resistance. In this respect, it is similar to the straight-line brake testing for ATVs, which can also be conducted on asphalt because it eliminates or minimizes other dynamic variables. As we also explained, however, other tests that involve higher speeds, transient steering inputs, or other vehicle dynamics such as engine braking raise serious concerns regarding the repeatability and usefulness of these on-asphalt tests for off-highway vehicles. Finally, ROHVA notes that conducting such tests could lead to unintended consequences by encouraging manufacturers to design for the test rather than real off-highway conditions.

As we discussed, ROHVA would appreciate the opportunity to report back to staff on its standards development efforts in approximately 60 days. I will contact you regarding the scheduling of that meeting. We also reiterate our request for all data and other information regarding ROV testing and standards development that has been generated by or on behalf of CPSC and that could be of substantial help in our ongoing standards development work. Such information is the subject of multiple outstanding FOIA requests for which partial responses have been provided by CPSC.

Please feel free to contact me if you or anyone else has questions about our presentations.

Very truly yours,



Paul C. Vitrano
Executive Vice President & General Counsel