

**LOG OF MEETING
DIRECTORATE FOR ENGINEERING SCIENCES**

SUBJECT: Consumer Product Safety Commission (CPSC) – Recreational Off-Highway Vehicle Association (ROHVA) Meeting. Meeting requested by the ROHVA to discuss technical aspects of the ANSI ROHVA 1-2014 standard approved September 24, 2014 and the CPSC staff's draft proposed rule concerning Recreational Off-Highway Vehicles (ROVs) dated September 24, 2014.

DATE OF MEETING: October 23, 2014

PLACE OF MEETING: National Product Testing and Evaluation Center, Rockville, MD

LOG ENTRY SOURCE: Barbara Little, CPSC

COMMISSION ATTENDEES: See attached attendance list

NON-COMMISSION ATTENDEES: See attached attendance list

SUMMARY OF MEETING:

The meeting convened with Patricia Adkins, CPSC Executive Director, stating that the purpose of the meeting was to have an open dialogue between ROHVA and CPSC engineers regarding ROHVA and CPSC staff's respective technical approaches to reducing the risk of deaths and injuries associated with ROVs. Participants discussed defining the problem the engineers are trying to solve; approaches to solving the problem; the use of passive versus active barriers in occupant protection; the handling of the vehicle; lateral acceleration; and speed limiting seatbelt systems.

CPSC staff defined the problems as reducing the rollover incidents and minimizing the impact of rollover incidents when they do occur. CPSC staff stated its approach to reducing rollover incidents included lateral acceleration, the J-turn test and vehicle handling. CPSC staff stated its approach to minimize the impact when rollovers do occur is occupant protection. ROHVA members stated that ROVs are complex vehicles so that vehicle design necessarily involves a balancing of different factors and repeated testing in real-world, off-road use.

With regard to the use of active versus passive barriers for occupant protection, ROHVA expressed concern that a requirement for a passive barrier would be too restrictive and would not allow the use of doors or nets to comply with such a requirement.

With regard to the vehicle handling, there was a general consensus that a non-linear response should be avoided, and that extremes of absolute oversteer or understeer were undesirable. ROHVA members stated that they want predictability in a vehicle, i.e., that the vehicle responds to input from the driver in the way the driver expects.

With regard to lateral acceleration (A_y), there was a discussion of tripped and untripped vehicle rollovers. There was general consensus that A_y is higher for tripped rollovers vs untripped rollovers. CPSC staff stated staff is trying to reduce the number of rollovers by setting a floor of lateral acceleration as a baseline. Some members of ROHVA disagreed that setting a baseline lateral acceleration would reduce the number of rollovers and expressed concerns about the impact of this requirement on vehicle performance. Members of ROHVA stated the approach in the voluntary standard to reducing the risk of injury from and the number of rollovers is through occupant protection, tilt table test, and steering wheel input.

Members of ROHVA expressed concerns about the difficulty of incorporating a speed limiting seat belt system into ROVs with carbureted or diesel engines, as well as the difficulty of extending the system to the passenger side of the ROV, because ROV passenger-side seats are removable and because of concerns that a passenger's actions (e.g., unfastening seat belt) could affect the driver's operation of the vehicle. Company representatives that have ROVs with speed limiting seat belt systems discussed the feedback they have received from customers: negative at first, but has changed behavior.

A representative from OPEI stated that its ROVs are designed primarily for commercial and utility use and that OPEI agrees in principle with what had been said by representatives of ROHVA.

A video of the meeting can be found at <http://www.cpsc.gov/en/Newsroom/Multimedia/>. A full transcript of this meeting will be provided at a later date.

U.S. Consumer Product Safety Commission
Meeting with the Recreational Off-Highway Vehicle Association (ROHVA)
Wednesday, October 23, 2014
1:00 PM
National Product Testing and Evaluation Center
5 Research Place, Rockville, MD

| NAME | AFFILIATION |
|--------------------|-------------|
| Elliot Kaye | CPSC |
| Bob Adler | CPSC |
| Marietta Robinson | CPSC |
| Anne Marie Buerkle | CPSC |
| Jonathan Midgett | CPSC |
| Patricia Adkins | CPSC |
| George Borlase | CPSC |
| John Murphy | CPSC |
| Nancy Lowery | CPSC |
| Katelyn Costello | CPSC |
| Sarah Garland | CPSC |
| Robert Franklin | CPSC |
| Hope Nesteruk | CPSC |
| Duane Boniface | CPSC |
| Vince Amadeo | CPSC |
| Barbara Little | CPSC |
| Carl Purvis | CPSC |
| Sarah Garland | CPSC |
| Justin Jirgl | CPSC |
| Jason Goldsmith | CPSC |
| Ron Jordon | CPSC |
| Patty Pollitzer | CPSC |
| Perry Sharpless | CPSC |
| Scott Ayers | CPSC |
| Sarah Newens | CPSC |
| Shaina Donahue | CPSC |
| Tim Smith | CPSC |
| Einstein Miller | CPSC |
| Boaz Green | CPSC |
| Kevin Lee | CPSC |
| DeWane Ray | CPSC |

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Meeting with the Recreational Off-Highway Vehicle Association
Wednesday, October 23, 2014
1:00 PM
National Product Testing and Evaluation Center
5 Research Place, Rockville, MD*

| NAME | AFFILIATION |
|---------------------|--|
| Bruno Larocque | BRP |
| Todd Izutsu | Yamaha Motor |
| Duane Taylor | ROHVA |
| Marie-Claude Simard | BRP |
| Roy Deppa | Marchica & Deppa LLC |
| Jamie Kovalaske | John Deere |
| Mark Esala | Arctic Cat |
| Annamarie Daley | Barnes & Thornburg – Outside Counsel Artic Cat |
| David Murray | Wilkie Farr |
| Paul Vitrano | Polaris |
| Davin Longren | Polaris |
| Louis Brady | Polaris |
| Jeff Eyres | Polaris |
| Erika Jones | Mayer Brown |
| Greg Knott | OPEI |
| Sonia Gonzalez | Diversified Reporting |
| Doug Wilson | Kawasaki Motors |
| Susan Vargas | Kawasaki Motors Corp., USA |
| Tyler Furman | Kawasaki Motors |
| Michael Wiegard | Eckert Seamans |
| Jay Richardson | Textron |
| Jake Alden | American Honda |
| Carol Gardner | Textron Specialized Vehicles |
| Keith Steenlage | Deere & Company |
| Bob Loehr | Deere & Company |
| Mark Austrian | Kelley Drye & Warren/OPEI |
| Ted Bettin | Arctic Cat |
| Brian Gabel | Yamaha Motor Co USA |
| Jared Taylor | Yamaha |
| Erik Pritchard | ROHVA |
| Ed Krenik | Bracewell |
| Gary Heydinger | SEA, Ltd |

*The Commission provided a conference line for people to call in and listen only; however due to technical error, the names of the people on the conference call are not available.