

**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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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	Artic 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.