

**LOG OF MEETING  
DIRECTORATE FOR ENGINEERING SCIENCES**

SUBJECT: Recreational Off-Highway Vehicles (ROVs) – Meeting requested by the U.S. Consumer Product Safety Commission (CPSC) staff to demonstrate test methodology for J-turn tests that are performed to measure the rollover threshold lateral acceleration of ROVs.

DATE OF MEETING: April 10, 2013

PLACE OF MEETING: Transportation Research Center (TRC), East Liberty, OH

LOG ENTRY SOURCE: Caroleene Paul, ESME

COMMISSION ATTENDEES: See attached attendance list

NON-COMMISSION ATTENDEES: See attached attendance list

SUMMARY OF MEETING:

Representatives of the Recreational Off-Highway Vehicle Association (ROHVA) met with CPSC staff to observe J-turn tests performed by SEA Limited at the Vehicle Dynamics Area (VDA) of the Transportation Research Center (TRC) located in East Liberty, Ohio.

CPSC staff opened the meeting by reviewing the scope and ground rules for the public meeting:

- The purpose of the meeting was to allow observation of the test methodology and preliminary analysis of data for J-turn tests of an exemplar ROV.
- Discussions would be limited to how the tests were performed and how the data was processed. No conclusions or rulemaking decisions would be discussed.
- The preliminary data would be presented for discussion purposes only. A full report on the test results will be made available to the public at a later date.

Dr. Gary Heydinger of SEA Limited presented an overview of the test surface and its maintenance, the loading conditions for the vehicles, the design of the outriggers used in testing, the instrumentation and parameters measured, the steering robot used to control the steering input, and the general test procedures to perform the J-turn tests.

The meeting participants were given the opportunity to inspect an instrumented vehicle and ask questions. The participants then observed a set of J-turn tests conducted on the VDA. Twenty test runs were conducted in equal batches in both left and right directions in the Southbound direction. Earlier tests that morning were conducted in the Northbound direction. Performing the test runs in opposite directions average any contributing variability. The test data was processed and presented to show how the

data is plotted to measure the vehicle's lateral acceleration at rollover threshold (defined by visual two wheel lift of the vehicle in a J-turn maneuver). Plots of the lateral acceleration showed consistent results with a standard deviation of less than 1 percent of the mean value.

SEA staff answered questions on the instrumentation, test methodology, and data processing. CPSC staff answered questions on when the full test report will be made available to the public and what will be included in the report.

MEETING ATTENDANCE RECORD  
ROHVA / CPSC Staff – April 10, 2013

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