

**LOG OF MEETING
DIRECTORATE FOR ENGINEERING SCIENCES**

SUBJECT: ASTM Committee F24 on Amusement Park Rides and Devices General Meeting

DATE OF MEETING: February 12-15, 2020

PLACE OF MEETING: New Orleans Marriott, New Orleans, Louisiana

LOG ENTRY SOURCE: Daniel Taxier (ESMC)

COMMISSION ATTENDEES: Daniel Taxier (ESMC), Richard McCallion (EXHR)

NON-COMMISSION ATTENDEES: Contact ASTM for attendee list.

SUMMARY OF MEETING:

This was the semiannual ASTM Committee F24 on Amusement Park Rides and Devices General Meeting. The related subcommittees and task groups met to discuss ongoing standards development and other factors pertaining to the safety of amusement park rides. CPSC Staff attended the following group meetings:

F24.90 Task Group on Ride Analysis (Risk Assessment)

The task group is developing a new core standard that will provide guidance for designers to conduct a safety-based risk assessment of amusement park rides and devices. The standard should be harmonized with *ISO 12100 – Safety of Machinery – General principles for design – Risk assessment and risk reduction* and *ANSI B11.0 – Safety of Machinery*. An early draft was presented; development remains ongoing.

F24.24 Task Group on Patron Clearance Envelope

The task group is addressing an error in the patron clearance envelope calculation in ASTM F2291. The group looked at language proposed for the next ballot.

F24.24 Task Group on Orphan Rides

The task group is continuing work to give guidance on best practices for product lifecycle management (PLM) of rides which no longer have an active original equipment manufacturer or OEM. The group plans to implement the best practices in a standard. The group is currently reviewing PLM practices in other ASTM standards.

F24.24 Task Group on Restraints

The task group discussed negatives on the latest ballot for updated language in ASTM F2291, and is working to address them.

F24.24 Acceleration Task Group

The task group discussed a request to harmonize with *ISO 17842 – Safety of amusement rides and amusement devices* and *EN 13814 – Safety of amusement rides and amusement devices*. In particular, ISO is looking to incorporate the technical specification *ISO 17929 – Biomechanical effects on amusement ride passengers* into ISO 17842. The task group will evaluate the technical specification to determine whether any pertinent information should be added to ASTM F2291.

The task group is also considering adding language for more specific requirements to address rides with significant lateral acceleration, and to more explicitly address safety considerations of patrons wearing accessories (such as VR headsets) on amusement rides.

F24.40 F770 Task Group

The task group discussed efforts to harmonize with *ISO 17842 – Safety of amusement rides and amusement devices* and *EN 13814 – Safety of amusement rides and amusement devices*.

F24.24 Task Group on Loads & Strengths

This task group discussed ongoing standards development regarding language about load combinations, finite element analysis, platform loads, wind loads, and patron weight. This work included some collaboration with the F24.70 subcommittee on Water Related Amusement Rides and Devices. The group is also beginning a review of non-mandatory language within F2291, with plans to remove all non-mandatory language from the main body of the standard.

F24 State Regulators

CPSC staff updated the group on exploring the possibility of hosting a publicly available area for posting amusement ride and device bulletins and safety alerts on the CPSC website; Saferparks.org is planning to stop hosting this information in the near future. Staff offered to continue elevating the issue through the appropriate CPSC channels, with the potential of hosting a public meeting later in the 2020 fiscal year as determined by CPSC. Staff will also look into updating the list of amusement ride and device regulators on the CPSC website.

The group continued to discuss clarifications of the Service Proven Guidelines in F2291, and discussed the possibility of clarifying the definition of off-the-shelf parts.

EVO Group #2

This task group has been working since 2017 to address corrosion issues as related to Manufacturing/Operations/Maintenance. The group discussed ongoing work in F770 to add requirements for document retention related to maintenance and major modifications. The group discussed several negatives on the previous ballot. The authors of the negatives were approached to collaborate on revising the language.

EVO Group #1

This task group has been working since 2017 to address corrosion issues as related to Design/Engineering. The group discussed ongoing work in F2291 to address prevention of water pooling, corrosion detection, and prevention of internal structural failures. The proposed changes will be balloted before the next general meeting.

The group has also determined that tasks assigned by the Executive committee regarding operational hours and fixing references cannot be addressed in the Design standard (F2291) alone. Therefore a new task group may need to be formed to address the issue from all portions of the product lifecycle and industry.

Contact ASTM for meeting minutes. The next general meeting will take place October 14-17, 2020 at Hilton Atlanta in Atlanta, GA.