NAFLIC

National Association For Leisure Industry Certification

Standards & Related Documents Sub-Committee

TECHNICAL BULLETIN - APRIL 1997

146. Cavazza Diego - Blizzard Roller Coaster Accident

We have received a report from NAFLIC members L.E.A. Inspection Services Ltd of an accident, at the end of the 1996 season, involving a Blizzard roller coaster manufactured by Cavazza Diego. The Blizzard is still manufactured, nowadays under the company name Italian Amusement Products s.r.l. (IAP), and sold by Top Fun s.a.s. A passenger, who is thought to have alighted on the wrong side of the train, slipped down through the track, possibly while trying to cross back over between the carriages.

The legal responsibility for the design safety of a foreign ride falls on the person who imports it (often the Controller, i.e. the showman or amusement park). We are not aware of the details in this case.

After discussions between the HSE and the ride controller various modifications have been agreed.

We do not have official details from the designer or Inspection Body (Design Review) of these modifications but some of the hazards associated with rides of this type (i.e. roller coasters that can have a ride cycle of more than one circuit of the track) that may involve risks which are significant enough to need action are as follows:-

- Particularly if the car access openings look similar, it is necessary to consider whether there are hazards associated with alighting on either side of the track. We are aware of accidents on other types of ride, even when it might seem obvious which side is intended to provide access, when disoriented passengers have got out on the wrong side.
- When persons, including members of staff, have to (or are likely to) cross the track periodically, it is necessary to consider whether the associated hazards have been satisfactorily minimised. Alternatively, steps can be taken to reduce the need to cross frequently, such as re-locating controls and release handles on the other side of the train.

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- When the ride involves more than one circuit of the track and the train passes through the station at more than slow speed or when the train, or part of it, enters the station with significant velocity, it is necessary to consider whether there is any hazard associated with striking station platform barriers. Where there is a significant risk of injury from the platform-end barriers, the designer sometimes specifies means of retracting them so that they only come into position once the train has stopped (or reached a sufficiently low speed).
- There may be a hazard if intending passengers are allowed access to the platform while the train is not stationary. Controlled access and egress may sometimes be required.
- There are a variety of hazards which may be involved in the setting of height restrictions for rides, including roller coasters. The need for such restrictions will always have to be considered by the designer (or the person who imports a ride) and should be considered in the Design Review and Initial Test process. They should not be varied without going through a fresh review. Where height restrictions have been specified they should be clearly displayed and strictly applied.
- Gaps between loading platform edge and train need to be safe.