

# NAFLIC

*National Association For Leisure Industry Certification*

## **Standards & Related Documents Sub-Committee**

### **TECHNICAL BULLETIN - AUGUST 1997**

#### **151. Emergency Stop on Round Up / Meteorite Rides**

NAFLIC members Richard James Associates inform us of a test on a Cadoxton Meteorite ride in which the Emergency Stop was applied with the ride running at full speed and tilt. In this position passenger safety depends on there being sufficient centrifugal force to hold the occupants against the outer wall of the rotor. RJA discovered that, following application of the Emergency Stop, the rotation speed dropped to an unsafe level before the inclination of the boom had been sufficiently reduced.

Many amusement rides have maximum safe speeds, but certain classes of ride also have one or more minimum safe speeds. In such cases, emergency and other stops must be designed to follow a safe sequence of events (known in the terminology of the draft European Standard as a *safety stop*).

In the case of this Meteorite ride RJA have found that this particular safety stop is not satisfactory. We note that this might also apply to loss of power and that the problem might also apply to some other makes.

It is our view that, in the case of new rides, the designer and manufacturer (confirmed by the inspection bodies carrying out Design Review and / or Initial Test) should check that minimum safe speeds have been correctly specified and implemented.

In the case of existing equipment it is our view that, having been alerted to the potential problem on a Cadoxton Meteorite, controllers of similar rides (and Appointed Inspection Bodies) need to re-assess the risk with a view to modifications if required. This might involve changes to the control system, the method of passenger restraint, or limitations to inclination. Any proposed modifications should be confirmed by an inspection body registered to carry out Design Review.

Committee Members :- Dr Garry Fawcett (Chairman), Mr Richard Barnes, Mr Bob Nicholls, Mr Doug Dadswell, Mr Peter Smith and representatives of Plant Safety Ltd, and Banwell & Associates Ltd

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