

NAFLIC

National Association For Leisure Industry Certification

Standards & Related Documents Committee

TECHNICAL BULLETIN - JUNE 1999

184. Reverchon Himalaya Accident - USA 1998

The USA's Consumer Products Safety Commission's investigation report on this accident, in which 3 children were ejected from a Superbob-type ride at a fair in Texas, is now publicly available. A 15 year old girl died in the accident.

The prosecutions, of the ride controller and the inspection body, have not yet taken place and the causes and blame are as yet uncertain. This technical bulletin discusses some of the immediate general thoughts which occurred to NAFLIC Standards Committee members while discussing the accident. These thoughts are not claimed to be connected with the accident.

The Himalaya was 14 years old at the time of the accident. For this age of amusement device the quality of regular maintenance may perhaps be particularly relevant. This is, of course, a direct responsibility of the ride's controller but will no doubt be observed by inspection bodies. While, under British guidance, the inspection body's task is to identify actual deterioration and loss of function it is likely that poor maintenance would lead an IB to look further than might otherwise be the case.

It remains to be established whether the passenger restraint was actually locked from the outset or whether being not properly locked contributed to it being torn from its hinges. It certainly seems to be the case that the inspection body identified, prior to the opening of the fair, that 4 cars were not to be used because their restraints had broken catches. Additionally, the ride operator's statement implied that the "cotter keys" holding the restraint hinges together had to be regularly replaced. The type used was noted, in the investigation report, to be different from the R-clips shown in the operating manual. About an hour prior to the accident, according to witness statements, the restraint on a different car had broken and the car was taken out of service. Where failures of safety-critical components occur in Britain there may be a need to consider the following :-

1. "The failure of any part designed to support or restrain passengers" is a "dangerous occurrence" under *The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995* and has to be reported to the Health & Safety Executive straight away. A written report, on the correct form, has to be subsequently submitted, within 10 days.

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

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However, we are aware that many people are unfamiliar with the detail of these Regulations and dangerous occurrences sometimes go unreported. This, of course, is an offence.

2. There is a duty to investigate the causes and implications of an accident or dangerous occurrence before recommencing operations.
3. Where it is known that there is a likelihood that safety critical components may suffer wear or damage requiring replacement, there should be an appropriate replacement procedure. Only the correct replacement parts should be used - i.e. authorised by the ride's designer / manufacturer / importer, or an alternative specified by a competent designer. In current British guidance, in either case the component specification should have been confirmed by a Design Review inspection body.
4. Where such parts regularly require replacement (and especially if dangerous failure in service occurs) the risk assessment may need to be revised (see Management of Health & Safety at Work Regulations 1992 and their Approved Code of Practice). Design modification may be essential.

New guidance on the principles of restraint and containment design are expected to be published by the industry in the not too distant future.