

# NAFLIC

*National Association For Leisure Industry Certification*

## Standards & Related Documents Subcommittee

### TECHNICAL BULLETIN - APRIL 1994

#### 082. Porthcawl Accident

A tragic accident occurred at Porthcawl on Good Friday 10 April 1994, on the Waterchute ride. A collapsed lighting support structure caused injuries to several persons and the death of one child.

The Waterchute, which may perhaps be considered a forerunner of the popular modern day Log Flume rides, is thought to be 52 years old and still has considerable appeal. There is, of course, an investigation by the Health & Safety Executive underway so no official information is yet available and we do not propose to speculate as to the causes of the accident.

As the injuries are known to have been caused by a collapsed element of secondary structure used to support decorative lighting we considered that it would be appropriate to remind members of the general implications of all such secondary structures and attachments.

It is not uncommon for secondary elements and attachments to be added to equipment, either as part of the original design or as subsequent modifications, without due thought being given to the hazards that might result and their associated risks. Examples which have been badly designed such as to be a potential cause of accidents or dangerous occurrences, are :-

- a) elements of structure to carry lighting displays (see also TB 060);
- b) welded lugs or drilled holes provided for the attachment of lighting panels etc. can reduce the fatigue strength of the main structure (see also TB 074);
- c) added brackets or fixings for TV monitors (e.g. on log flumes);
- d) fixed theming (of inadequate strength or interfering with motion envelopes);
- e) animated figures and effects which, for instance, suffer fatigue);

The calculation, design review and controls on manufacturing quality of items such as those listed are often omitted. We think all persons concerned that it is clear that the duties concerning satisfactory design and manufacture of such secondary elements falls within Section 6 of the Health & Safety at Work Act 1974. "Fairgrounds and Amusement Parks - A Code of Safe Practice" and the Technical Annex also imply that, where an associated hazard exists, which it normally does, such components should be subject to Independent Design Review, Initial Test, and annual Thorough Examination.

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