## **NAFLIC**

National Association For Leisure Industry Certification

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

## TECHNICAL BULLETIN - JUNE 1997

## 150. Wicksteed Park Waterchute Dangerous Occurrence

There was a recent dangerous occurrence at Wicksteed Park involving a ride known as "Nautic Jets". This waterchute type device is approximately 7 years old and was imported by Wicksteed from a Swedish manufacturer - Heega.

The Swedish ride was constructed to a German design which is thought to have been TÜV approved. The boats are single seater and are loaded at the lower level before being winched to the top of the chute and released. The chute ends in a ramp from which the boat becomes airborne before landing on the water. The boat remains attached to the winch rope throughout this sequence.

The ride has a parking / loading brake which is applied to the winch. Loss of power results in application of the brake. Unfortunately, the dangerous occurrence involved the brake engaging when the boat had nearly reached the water. This resulted in the boat somersaulting and landing upside down on top of the passenger. The restraint catch was designed to release when inverted and the girl luckily escaped with no permanent injury.

Some general issues suggested themselves to us in the course of our discussion. Generally, risk assessment of brake requirements should assume that power will be lost occasionally and the designer and design reviewer should ensure that the system deals safely with this in all the circumstances in which it might occur. This, of course, includes loss of power when the boat is at different positions on the chute (with the associated instantaneous speeds).