

# NAFLIC

*National Association For Leisure Industry Certification*

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

### **TECHNICAL BULLETIN - APRIL 1996**

#### **127. Soriani & Moser "Super Loop on Top"**

LTC Ltd have notified us of some recent findings concerning this Soriani & Moser ride. To our knowledge there are only two of this type in the UK at present. The ride involved is only 2 years old.

LTC's findings involve safety-critical pins in two different uses, both found to exhibit cracking.

Firstly both main universal coupling pins were found to exhibit cracking from the transverse greasing holes when examined using Magnetic Particle Inspection (fluorescent method).

The second instance involves the main rotating arm having the additional articulating hinge. The hinge pin was removed, subjected to Magnetic Particle Inspection, and also found to have transverse cracking initiating from a lubrication hole.

It is believed that the cracks resulted from fatigue, obviously with a fairly short timescale. One might infer that there is a design limitation in these components. However, we have not seen any relevant design calculations or Design Review and cannot confirm whether this is truly the case. Nevertheless, unless further information becomes available, we believe that it is safe to assume that these pins on any Soriani & Moser Super Loop on Top are likely to suffer fatigue damage.

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

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