NAFLIC

National Association For Leisure Industry Certification

Standards & Related Documents Sub-Committee

TECHNICAL BULLETIN - AUGUST 1992

025. Soriani & Moser Tagada

Wilson Consukltants provided details of the following incident which was also discussed at the meeting of the JAC (Joint Advisory Committee for Health & Safety in the Fairground Industry) held at Preston on 13 August 1992.

During the early part of the 1992 season a Soriani & Moser Tagada sufferred collapse, in service, of its main boom. The ride was thought to be 12 years old having operated in Sweden between 1981 and 1990. It had been in the UK since 1990. The boom, which failed in bending fatigue, was tubular and measured approximately 300 mm outside diameter with 17.5 mm wall thickness. The bending stiffness was increased by a vertical 20 mm plate passing down the tube centre and plug welded in position.

The manufacturer's calculations related to a more recent version of the ride in which the tube wall thickness had been increased to 25 mm with an enhanced steel specification (UTS of 510 N/mm^2).

The calculations do not make clear whether fatigue failure of the more recent boom design will be avoided. It is therefore considered important, for all Soriani & Moser Tagadas, that NDT in the region of boom stress raisers should be carried out not less than annually using appropriate procedures. It is also important that the boom should not have any unauthorised weldments.

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