NAFLIC

National Association For Leisure Industry Certification

Standards & Related Documents Committee

TECHNICAL BULLETIN - SEPTEMBER 2005

304. Sonacase Twist Restraint Bars

At the end of June 2005 we received notification, including photographs, from John H Rundle Ltd that they had modified the passenger restraint / locking mechanism on a Sonacase Twist ride as a result of serious defects.

One of the passenger restraint bars had been found to be seriously cracked, but four others were found with crack indications by penetrant inspection. On a similar machine the lap bar brackets were also showing signs of fatigue.

The region exhibiting the fatigue cracks was one of those identified by A.S.P. Consulting and Wilson Consultants back in 2000. As a result of their findings with respect to this type of Sonacase design, the registered inspection body Wilson Consultants issued an Urgent Defect Report which has never been rescinded. We remind registered inspection bodies of the ADIPS *Rules of Procedure for the Issuing and Resolution of Urgent Defect Reports (UDRs)*, the current version of which is numbered "UDR090604". This document includes a procedure which ADIPS expects to be followed when it is wished to resolve safety issues included in a UDR.

By 2004 the Health and Safety Executive also expressed their serious concerns, in a letter from Mr Gerry Muir and addressed to members of HSE's FJAC (Fairgrounds and Amusement Parks Joint Advisory Committee), regarding the design safety of restraint systems on some Twist rides manufactured by Sonacase. We reported this in our Technical Bulletin 274. We believe that the letter related to the same restraint design which had given A.S.P. Consulting and Wilson Consultants serious cause for concern.

We have previously written about 4 accidents on Sonacase Twists - in Technical Bulletins 014, 134, 157 and 224. These all followed from passenger ejection as a result of restraint problems.