## NAFLIC

National Association For Leisure Industry Certification

## **Standards & Related Documents Committee**

## **TECHNICAL BULLETIN - JUNE 2000**

## 211. Maxflight VR2002 - Shaft Fatigue Lives

We have been requested to issue a Technical Bulletin with respect to a two-seater simulator manufactured by Maxflight (USA) and designated VR2002.

This amusement device went through the process of Design Review in 1998 / 1999 (by NAFLIC members Wilson Consultants and SSCL). When fatigue was assessed, by Wilson Consultants, it was found that some safety-critical components (particularly the main support shafts and counterweight shafts) only had short lives, e.g. 1000 operating hours. This assessment was subsequently found to be realistic when fatigue cracks were discovered on a VR2002 in service.

After the initial design review work, design modifications were made to some of the components and the shortest fatigue lives have been extended, although only to a couple of years or so on a busy site.

There may have been modified designs since that time, although we are not aware of any at this stage. It is therefore important that purchasers, or any other person who imports one of these rides, should take note of the various comments and recommendations (inspection etc.) included in the Report of Design Review.

Committee Members :- Dr Garry Fawcett (Chairman), Mr Richard Barnes, Mr Bob Nicholls, Mr Robert Casey, Mr Peter Smith, Mr Richard Cousins and Mr Ian Grant

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