

NAFLIC

National Association For Leisure Industry Certification

Standards & Related Documents Sub-Committee

TECHNICAL BULLETIN - OCTOBER 1997

159. Bennett Paratrooper Ram Trunnion Fatigue

NAFLIC member Nottingham (UK) Ltd have reported to us another instance of a known fatigue life limitation on a Bennett Paratrooper ride, 15 or 16 of which were built.

The Paratrooper is a lifting type, actuated by a single hydraulic cylinder in an inverted (rod down) configuration. A mid-cylinder trunnion provides the hinging to the boom.

The stub shaft shoulders at these trunnions are known to develop fatigue cracks. Although they might be detected by ultrasonics, a more reliable early diagnosis of crack propagation is provided by strip down and magnetic particle inspection.

Over the years some of these Bennett Paratroopers have had larger stub shafts fitted. It is certainly the case on those that have not been modified that Inspection Bodies and others will need to monitor the stub shaft shoulders.

Committee Members :- Dr Garry Fawcett (Chairman), Mr Richard Barnes, Mr Bob Nicholls, Mr Robert Casey,
Mr Peter Smith and representatives of Plant Safety Ltd, and Banwell & Associates Ltd

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