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Intamin raft boat lifting bolt failure

NAFLIC has received a report from a UK registered inspection body of several failures of the lift eyelet bolt and the raft GRP on an Intamin raft boat.

Failure modes:

1. The lift eyelet bolt and its threaded connection point had suffered from corrosion and sheared during lifting operations (figure 1).
2. The raft GRP around the lifting eye had suffered from UV degradation with the eyelet assembly detaching from the boat's GRP.

It is understood that the lifting eyes are solely used for lifting operations during maintenance periods and not for passenger transit. These eyelets are categorised as a lifting accessory under the LOLER guidelines and inspected as such, requiring six monthly inspection.

Given the nature of use and level of strip required to access these components, it may be possible to risk assess and mitigate the risk of failure through the implementation of safe alternative lifting and transportation practices. Known examples include the use of boat lifting frames (figure 2 shows an example), ground transportation via crate rather than suspension and limiting the use of existing lifting eyes to only lift boats clear of the floor.

N.B. Care must be taken when lifting such items as standing water can dramatically increase boat weight.



Figure 1



Figure 2

Committee Members: Mr. D Dadswell (Chairman), Mr. A Mellor (Secretary), Mr. P Smith, Mr. J Green, Mr. D Cox, Mr. I Davies, Mr. J Shilling, Mr. D Inman & Mr. R Hiscoe

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