



U.S. Coast Guard Safety Alert



Marine Safety, Security and Environmental Protection

February 25, 2005
Washington, DC

Alert 2-05

Loosening of Critical Fasteners

Recently a large deep draft vessel was hoisting aboard its rigid hull inflatable (RHI) rescue boat when it's lifting frame, an inverted u-shaped component, separated from the brackets that attached it to the deck. As a result, the boat fell back into the water and its attending crewmember was ejected. The uninjured crewmember was promptly recovered and damage to the rescue boat was negligible.



MODEL: Pacific 22 NK III

MANUFACTURER: Osborne Rescue Boat Company (The company is no longer in business.)

LOCATION: Havant, Hampshire, United Kingdom.

Each side of the lifting frame is fastened to the deck by a bolt and nut. It appears that due to vibration the nuts securing the bolts backed off. While the boat was being lifted the bolts also backed out of their respective holes. Although the frame was fitted with non-weight bearing struts (not visible in the photographs) they were unable to handle the load and parted as the boat fell.

An investigation revealed no specific maintenance requirements or manufacturer recommendations for periodic inspection of the lifting frame bolts. A vessel officer reported that limited visual inspection took place monthly but indicated that a "hands-on" equipment check did not occur.

Crewmembers easily remedied the situation to prevent future accidental disassembly of the fastener by drilling a hole through the threaded end of the bolt and installing a cotter or split pin to prevent the fastener from backing off. (See the following photograph.)

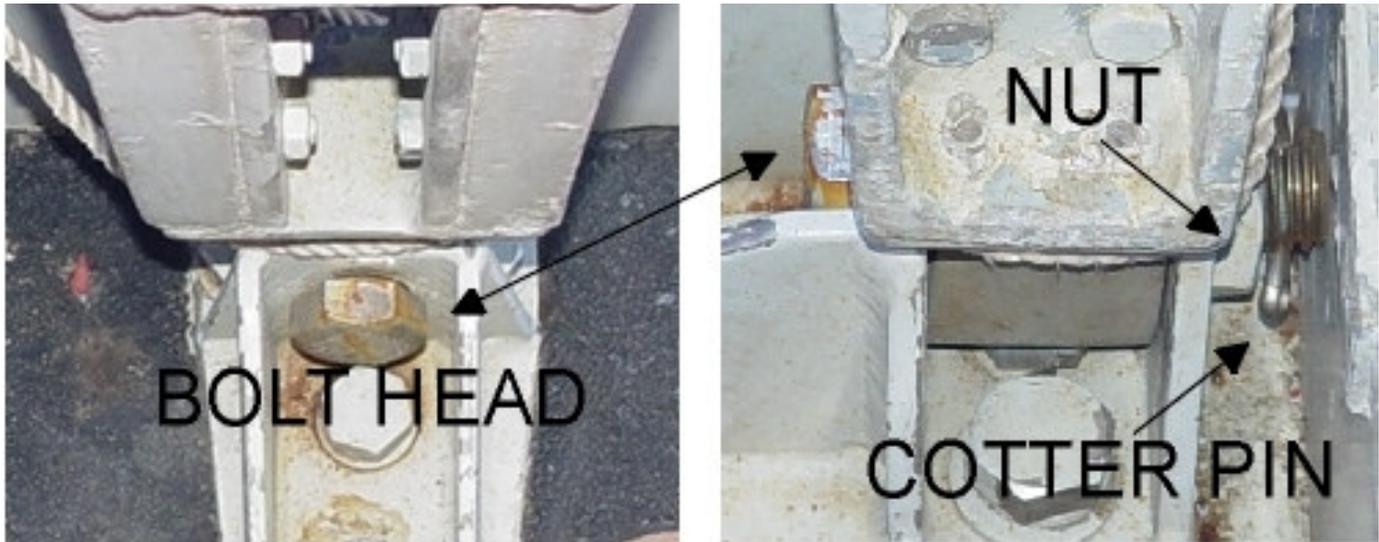
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To prevent a similar casualty the U.S. Coast Guard strongly recommends that vessel owner operators having vessels equipped with RHIs manufactured by Osborne Rescue Boat Company or other equipment constructed in a like manner -

- ensure that existing inspection and maintenance procedures include all critical components,
- carefully inspect the equipment for loosening of key components, and;
- where needed make authorized modifications.

This casualty was investigated the U.S. Coast Guard Marine Safety Office, Hampton Roads, Virginia.

This safety alert is provided for informational purposes only and does not relieve any existing domestic or international safety, operational, or material requirement.
