



Friday 6<sup>th</sup> May 2011

## Bulletin 762 - 05/11 - Survival craft care - Worldwide

**A recent incident under investigation by the Marine Accident Investigation Branch (UK) provides a reminder that minimum standards are just that and that the practices of good seamanship and a well established safety culture are the true guardians of safety.**

### BACKGROUND

Two crewmen were hospitalised and one died recently in an accident during a routine launching and recovery of a vessels rescue craft. The fall wire attached to the rescue boat parted during a routine drill which was being conducted in the sheltered waters. The rescue boat had been hoisted to its stowed position when the incident took place and the boat and its' four crew fell nearly 29m into the water.

### INITIAL FINDINGS

The rescue boat had a certified weight of less than 1 tonne but when later weighed during investigation was found almost 48% heavier than stated. This increase in weight should not have resulted in the failure of its fall wire due to the safety margins in place and investigation into the failure of the wire remains ongoing.

The Rescue craft was constructed with an inner and outer hull, the voids below deck were divided into 16 compartments, 15 of which were filled with rigid polyurethane foam to provide a watertight, buoyant volume. The rescue craft was fully certified and met the requirements of SOLAS, the Life Saving Appliance (LSA) Code *etc...*

Investigation has identified that 14 of the 15 foam-filled compartments had been penetrated by water. In addition, the foam in the lower sections of the hull contained cavities and there were voids between the foam and the hull.

Although the boat was fitted with a drain plug on the transom, the internal compartments were not interconnected and there was no designed way to drain water that may have made its way into the internal compartments.

## **SAFETY ISSUES**

Water ingress and retention within a foam-filled internal compartment of a rescue craft is a serious cause for concern and can have the following consequences:

- The SWL of the davit and fall could be exceeded
- The rescue boat's performance and manoeuvrability could be adversely affected in relation to:
  - the ability to self-right (or be righted) after capsize
  - the ability to tow survival craft, and
- Safety of the 5-yearly dynamic test where the boat is included in the test weight could be compromised.

The use of foam-filled compartments in the construction of rescue craft is common throughout the industry and it is possible that the problems of water ingress and retention within a foam filling may not be limited to any single type or make of craft.

## **RECOMMENDATIONS**

Owners and managers of vessels that use rescue boats or fast rescue craft built with integral polyurethane foam-filled compartments should:

- Follow the advice issued by the manufacturer in the form of the operators manual paying particular attention to maintenance of the crafts hull and the impact that direct sunlight may have on the degradation of the boats hull. If this manual is in a foreign language to that of the working language of the crew the manufacturer should be contacted in order to obtain a correct translation.
- Be alert to the possibility of boats being heavier than designed and arrange for the boats to be weighed, or boat manufacturers contacted for advice, where doubt exists.
- Inspect boats' hulls and exposed decks for possible holes, cracks, or fittings through which water could penetrate.
- Ensure that drain plugs fitted to the hull are regularly opened and that they fit well and do not leak themselves.
- Monitor boat performance for unusual characteristics that could be attributed to an increase in weight, eg that it does not feel 'heavy' or 'sluggish' when manoeuvring.

Source of Information:

SIGTTO - Safety

(MAIB Safety bulletin: 1/2011)

[http://www.maib.gov.uk/cms\\_resources.cfm?file=/SB1-11.pdf](http://www.maib.gov.uk/cms_resources.cfm?file=/SB1-11.pdf)