MAIB Safety bulletin - Fatal accident, Dover Harbour (1/2003)

Fatal accident
during a marine evacuation system deployment drill
in Dover Harbour
on 9 October 2002

This document, containing Interim Safety Recommendations, has been produced for marine safety purposes only. It is issued on the basis of information available to date.

The Merchant Shipping (Accident Report and Investigation) Regulations 1999 provide for the Chief Inspector of Marine Accidents to make recommendations at any time during the course of an investigation if, in his opinion, it is necessary or desirable to do so.

The Marine Accident Investigation Branch (MAIB) is carrying out an investigation into the fatal accident of a volunteer evacuee during a deployment drill of a vertical-chute type marine evacuation system. The MAIB will publish its report on completion of its investigation, with final recommendations.

The volunteer evacuee became stuck in the chute and lost consciousness during the rescue. She was released and taken to hospital where she was pronounced dead. This case illustrates that blockages in vertical-chutes can occur, and this bulletin makes interim recommendations on the conduct of drills, the adverse effect of blockages in an actual emergency, and the need to remove the risk of blockages in the chutes.

Stephen Meyer
Chief Inspector of Marine Accidents

Press Enquiries:(+44) 0207944 4691 / 3387; out of hours:(+44) 020 7944 5925
Public Enquiries:(+44) 020 7944 300
Internet address for DfT Press Notice
http://www.dft.gov.uk

INTERIM SAFETY RECOMMENDATIONS

Background

At about 1219 on 9 October 2002, a fatal accident occurred while an 'abandon ship' drill, using a vertical-chute type marine evacuation system, was being conducted in Dover harbour.

After the marine evacuation system was deployed, eight people descended the vertical-chute into two large, fully reversible liferafts. These people were evacuee receivers and assistants, observers and manufacturer's representatives. After some 124 people had gone down the chute and entered the liferafts, a female volunteer began her descent. However, 9 seconds later she shouted for help; the chute controller stationed at the top shouted to her to wriggle, but she replied that she could not. A chute sweeper*, who was one of the ship's officers, then went down the chute in a controlled manner and found the volunteer stuck in a piked position (hands and feet above her head) inside one of the descent sections. Her lifejacket and jacket had come off and were over her face and head. The sweeper tried to pull her up, but was unsuccessful. He called out for someone to cut her out. The chute was then cut to allow her to descend in a controlled manner into the liferaft, where she arrived unconscious. After first-aid had been administered, she was evacuated ashore by a fast craft, which had been standing by, and taken to hospital where, sadly, she was pronounced dead.

*A person trained to clear blockages in chutes.

Comments

This tragic accident has highlighted a number of risks that need urgent attention. The volunteer who died might not have been particularly fit or healthy. Until the actual cause of death has been established, it is recommended that only fit and healthy volunteers are selected to participate in drills.

The initiator for this accident appears to have been the riding up of the volunteer's lifejacket over her face and head. It is recommended that all personnel using a vertical-chute marine evacuation system should be provided with lifejackets that cannot ride up.

It would seem that in struggling, the volunteer caught her feet, which allowed her body to continue downward. She ended up in a piked position, thus blocking the chute. Recommendations are made to shipping companies to take this possibility into account in their safety case/risk assessment of evacuation procedures, and also to manufacturers to remove all possible causes for such a blockage.

Interim Safety Recommendations

Shipping companies, which have, or are, intending to have vertical-chute marine evacuation systems installed on their ships, are recommended to:

1. Revalidate their risk assessment for drills, with particular emphasis on selecting fit and healthy volunteers.

2. Revalidate their safety case and/or risk assessments on the adverse effects of possible blockages in chutes at the time of the evacuation in an actual emergency.

3. Ensure that all personnel using a vertical-chute marine evacuation system wear lifejackets which will not ride up during the descent of a chute.

Manufacturers of all vertical-chute marine evacuation systems and the authorising bodies, are recommended to:

4.Take urgent action to remove any possible causes of blockages in chutes by redesign and/or other means.