Transportation Safety Board of Canada



Bureau de la sécurité des transports du Canada

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616-11/06 M06L0063

30 November 2006

Mr. William Nash Director General Marine Safety Transports Canada Place de Ville, Tower C 11th Floor, 330 Sparks Street Ottawa, Ontario K1A 0N8

RE: Marine Safety Advisory Letter No. 11/06 – Inadequacy in design and operation of the, type SRS-37, lifeboat release gear mechanism manufactured by Shigi Shipbuilding Co. Ltd

Dear Mr. Nash:

On the morning of 22 May 2006, while at anchor in the Bay of Sept Iles, a life boat drill was carried out on board the bulk carrier *Sea Urchin*. At 1150, during the recovery of the starboard lifeboat with five persons on board, the after release gear mechanism opened. The forward mechanism did not take the load and also opened. The lifeboat fell, stern first from a height of 11 m, into the sea. As a result, one of the five crew members was fatally injured.

The lifeboat was brought to the Transportation Safety Board (TSB) Engineering Branch laboratory for examination. The davit launch gravity type enclosed lifeboat model SZ-53BR was fitted with a SRS-37 type release gear mechanism manufactured in 2001 by Shigi Shipbuilding Co., Ltd. This type of lifeboat was approved by the classification society Nippon Kaiji Kyokai (ClassNK), under the approval number, N-478.

To date the examination has revealed that although the release handle was secured, i.e. the safety pin inserted, the release gear mechanisms were not fully reset. As a result, the hooks were not locked in place prior the recovery. The design of the SRS-37 type release



gear mechanism made it such that it is possible to secure the release handle in the closed position without the hook being properly reset, hence giving the crew members a false sense of security. (Please see the accompanying 3D animation)

It should be noted that the SRS-37 type release mechanism has been out of production for many years and an improved design has been produced since. However, according to the manufacturer, approximately 500 hundred lifeboats with this type of release gear mechanism were fitted on vessels operating worldwide.

On 27 October 2006, TSB made a presentation to the manufacturer, classification society and the P&I Club representatives to communicate the safety deficiencies. However, Shigi Shipbuilding Co. Ltd may not be in a position to ensure that all vessels fitted with this equipment are made aware of the safety issue. Transport Canada may therefore wish to inform the Paris and Tokyo MOU Secretariats that an inspection should be undertaken of all vessels equipped with the SRS-37 type release gear mechanisms and that the ability of the ship's crew to safely operate the release mechanism verified accordingly.

Yours sincerely, Hers Pottle

Ken Potter

Acting Director of Investigation - Marine

Enclosed; Animation

c.c. Shigi Shipbuilding Co., Ltd, Japan ISS Machinery Services Limited, Japan ClassNK - Montreal

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BACKGROUND INFORMATION

TSB Occurrence No.: M06L0063

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