



MARITIME SAFETY COMMITTEE
83rd session
Agenda item 20

MSC 83/20/2
24 July 2007
Original: ENGLISH

GENERAL CARGO SHIP SAFETY

Focused inspection campaign on ships' lifting appliances

Submitted by New Zealand

SUMMARY

Executive summary: Concern arising from a number of significant failures of lifting appliances during cargo operations on ships while in New Zealand ports, led New Zealand to conduct a focused inspection campaign. This document provides a summary of the finding of the campaign and requests the Committee's consideration.

Action to be taken: Paragraph 13

Related document: MSC 83/INF.10

Background

1 Between 2000 and May 2007, New Zealand experienced a total of 334 incidents on foreign flagged ships, of these 64 involved ships' lifting appliances while undertaking cargo operations within New Zealand ports. The 64 incidents resulted in one fatality and 18 serious injuries. This equates to approximately one incident every five weeks, a rate that gives New Zealand great concern about the high potential risk of serious harm or fatalities. In order to investigate further New Zealand conducted a focused inspection campaign on ship's lifting appliances.

2 Under New Zealand legislation, maritime rule part 49 – "ships' lifting appliances", any lifting appliances (ship's cranes and loose gear carried on board a ship) on a New Zealand ship or a foreign flagged ship that is used for working cargo in New Zealand, must be tested and inspected. It also requires the marking of a ships' lifting appliance and loose gear, the carriage of a register of equipment, rigging plan and certificates of test for the lifting appliances and loose gear. New Zealand's legislation reflects articles 21 to 30 of the International Labour Organization (ILO) Occupational Safety and Health (Dock work) Convention, 1979 (No.152).

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Focused Inspection campaign (FIC)

3 Prior to commencing the campaign, letters explaining the objectives of the FIC, together with copies of the checklist were sent to ships' agents, stevedores port operators and harbourmasters. The majority of ships inspected were aware that New Zealand Maritime Safety Inspectors would be paying close attention to the lifting appliances on board ships during routine port State control inspections.

4 Between 1 September and 30 November 2006, the lifting appliances on all ships eligible for Port State Control (PSC) inspection in New Zealand were inspected.

Results of the campaign

5 The tables below provide a summary of the items checked during the campaign and the number of non-conformances found. Each inspection included checking the ship's register of lifting appliances, test certificates and maintenance records. This was followed by a visual assessment of lifting appliances to verify their general condition and, by sampling, the veracity of information contained in the documentation.

6 A total of 86 ships were checked, of which 30 were reported with non-conformances.

Document checks	Number of non-conformances
Absence of certificates of test and inspection for associated loose gear	3
Absence of manufacturers' certificates of guaranteed minimum breaking load of hoist and topping lift wires	2
No rigging plans or manufacturer's operation and maintenance manual for cranes or derricks	1
Information provided in certificates for wire ropes fitted to cranes or derricks did not match specifications in the rigging plan or manufacturers' manuals	3
No written procedures for inspection and maintenance of lifting appliances	6
Records did not verify that the procedures for inspection or maintenance of lifting appliances had been followed	12
The procedures did not specify intervals or other criteria for replacement of crane wire ropes	20
Records did not verify that wire ropes had been replaced as specified	14

Physical checks	
Cranes, derricks, wire ropes or associated cargo gear did not appear in good order	4
Cranes or derricks were not clearly marked with SWL or limiting angles or radii of operation	2
SWLs did not match with the test certificates	2
Wires or attachments did not meet the specifications of the rigging plan	1
Derrick guys not set or attached to approved eyes in accordance to the rigging plan	5
Chains, shackles, blocks or hooks not marked with identification or SWL	5
No means of safe access for crane or winch drivers	1
Miscellaneous	
Cargo grabs to be used had no current test certificates or documentary evidence of a thorough examination within the last 12 months	Nil

7 Lifting appliances were checked on 86 ships, of which 30 were bulk carriers, 21 general cargo, 19 container and nine refrigerated cargo ships, five car carriers and two tankers. Eighty (80) ships were fitted with deck cranes, five ships with derricks and one was fitted with a gantry crane.

8 No non-conformances were reported on 56 ships, or 65% of the number inspected. Port State control deficiencies were issued to 11 ships. On one ship, cargo work was stopped and an "Imposition of Conditions Notice", issued under New Zealand Health & Safety legislation, was issued prohibiting the use of lifting appliances until they had undergone a thorough examination by a classification society surveyor, and ratification of any defects found. Two more ships were issued with port State control deficiencies stating that cranes were not to be used until they had undergone thorough examination by classification society surveyors and rectification of any defects found. Three ships were advised not to use cranes until wire ropes had been replaced and, on one ship, a crane was not to be used until safe access had been provided for the crane driver. It was also noted that, on two ships, the cargo cranes were not in use.

Inspection and maintenance of lifting appliances

9 The summary of findings indicates that the main concern was with inspection and maintenance procedures, particularly for monitoring the condition and replacement of wire ropes. Six ships had no written procedures for inspection and maintenance of lifting appliances. For 12 ships, the records did not verify that the procedures for inspection or maintenance of lifting appliances had been followed. On 20 ships, the procedures did not specify intervals or other criteria for replacement of crane wire ropes, and 14 ships could produce no records to verify that wire ropes had been replaced as specified.

Are there gaps within the system?

10 It is noted by New Zealand that clause 10.1 of the International Safety Management Code (ISM) states:

“The Company should establish procedures to ensure that the ship is maintained in conformity with provisions of the relevant rules and regulations and with any additional requirements which may be established by the company.”

11 It appears that there are limited “relevant rules and regulations” issued by a limited number of classification societies, and that not all classification societies incorporate ship’s lifting appliances within their survey requirements.

12 Thus, New Zealand believes, based on the results of the focused inspection campaign and the number and type of safety incidents occurring in New Zealand ports, that there is an urgent need for the development of appropriate and practical guidelines, or mandatory requirements, for the maintenance, testing and inspection of ship board lifting appliances and loose gear.

Action requested of the Committee

13 The Committee is invited to consider the information contained in this document and take appropriate action.
