



SUB-COMMITTEE ON STANDARDS OF
TRAINING AND WATCHKEEPING
37th session
Agenda item 6

STW 37/INF.4
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ENGLISH ONLY

MEASURES TO PREVENT ACCIDENTS WITH LIFEBOATS

Outcome of Focused Inspection Campaign on Lifeboats

Submitted by Australia

SUMMARY

<i>Executive summary:</i>	This document provides information on a recent focused inspection campaign on lifeboats carried out by Australia. An indication of the effectiveness of existing measures to prevent accidents with lifeboats during drills is provided by the resulting statistics
<i>Action to be taken:</i>	Paragraph 9
<i>Related documents:</i>	DE 48/5/4; MSC/Circ.1049; MSC/Circ.1093, MSC/Circ.1136; MSC/Circ.1137; FP 50/13

Introduction

1 In a submission to the forty-eighth session of the Design and Equipment Sub-committee (DE 48/5/4) Australia expressed concern about the continued occurrence of lifeboat accidents, mentioning in particular an accident in October 2004 in which two crew were killed and others injured.

2 Following this incident, and as part of its port State control programme, Australia instigated a Focused Inspection Campaign during the months of May, June and July 2005. The campaign related to lifeboat launching arrangements and in particular the on-board implementation of the measures agreed by the Organization through MSC Circulars 1049, 1093 and 1136. The purposes of the Campaign were to increase awareness of the IMO Circulars and lifeboat related safety issues, and to gather information.

3 Annex 1 shows the questionnaire used by Port State Inspectors in the Campaign, together with the collation of answers to each question. This questionnaire was supplemented by both general instructions and more specific guidance in relation to individual questions. Should similar campaigns be contemplated by other Administrations, copies of this guidance information could be provided to them on request.

Outcome of Inspection Campaign

4 The outcome of the Campaign is summarized in Annex 2. This information is available with colour graphs and photographs on the Australian Maritime Safety Authority web-site at: http://www.amsa.gov.au/Shipping_Safety/Port_State_Control/Focused_Inspection_Campaigns/Phase8.asp

5 As indicated in DE 48/5/4, it is of serious concern that MSC/Circ.1093 had not been implemented on a significant number of ships and that personnel on 16% of ships to which it is applicable were unaware of MSC/Circ.1136, while no steps had been taken to identify the hazards associated with lifeboat drills on more than 12% of applicable ships.

6 Although the rate of hardware deficiencies was relatively low, the serious nature of some of those deficiencies still gave cause for concern as to whether actions taken to date have been, or are likely to be, effective in reducing the still unacceptably high rate of accidents associated with lifeboat drills.

7 In Australia's view, the information provided by this inspection campaign clearly indicates a need for consideration of stronger measures to reduce the frequency and severity of lifeboat accidents occurring during drills. As such Australia has provided a submission to the fiftieth session of the Sub-committee on Fire Protection (FP 50/13/1) which provides this report and proposes a number of actions for consideration.

8 Noting the time between FP 50 and STW 37 and noting also that human factor problems were also identified, indicating that current ongoing training on board ships may not always be adequate, it was felt that the information contained in the report would be informative to this session.

Action requested of the Sub-Committee

9 The Sub-Committee is invited to note this information and the views presented.

ANNEX 1

**FOCUSED INSPECTION CAMPAIGN ON LIFEBOATS
MAY TO JUNE 2005**

Total Ships: 719

		Answers		
Campaign Question		No	Yes	N/A
1.	Do records indicate that lifeboats has been launched and manoeuvred in the water?	19	692	8
2.	Does the ship have davit-launched lifeboats?	78	635	6
3.	Do records indicate that the static and dynamic test of the winch brake have been carried out?	56	565	98
4.	Do records indicate that lifeboats and davits are maintained?	1	636	82
5.	Do records indicate that the falls are maintained?	1	634	84
6.	Has the vessel or its operator identified the hazards associated with the launching and recovery of lifeboats?	88	547	84
7.	Are any procedures or instructions implemented in relating to the hazards identified in Q6?	78	531	110
8.	Are all key personnel familiar with the procedures laid down in the vessels SMS, for the launch and recovery of lifeboats?	20	605	94
9.	Is the ship familiar with MSC/Circ.1136?	102	534	83
10.	Has MSC/Circ.1093 been implemented on board?	65	566	88
11.	Are on load releases fitted?	146	486	87
12.	Do records indicate that the on-load releases gear has been maintained and tested?	32	451	236
13.	Can the ships crew demonstrate an understanding of the operation of the on-load release?	11	474	234
14.	Are clear operating instructions for use of on-load release, in the working language of the ship, provided with a suitably worded warning notice?	21	465	233
15.	Are the Lifeboats fitted with on-load release mechanisms, which require a 'deliberate and sustained' action by the operator?	8	441	270
16.	Are the davits in satisfactory condition?	6	631	82
17.	Are the means of attaching the lifeboat hook assemblies to the lifeboat in satisfactory condition?	8	624	87
18.	Do all the sheaves and other moving parts operate correctly?	9	615	95
19.	Are the davit limit switches operating correctly?	22	594	103
20.	Is the winch brake operating correctly in freefall mode?	12	595	112
21.	Is the release mechanism designed so that crew members in the lifeboat can clearly observe when the release mechanism is properly and completely reset and ready for lifting?	26	438	255
22.	Is the release control clearly marked in a colour that contrasts with its surroundings?	9	505	205

ANNEX 2

FOCUSED INSPECTION CAMPAIGN ON LIFEBOATS SUMMARY REPORT

An FIC was conducted by AMSA Surveyors from May to July 2005. These inspections were conducted in conjunction with regular PSC inspections.

The aim of the campaign was to improve safety of lifeboat operations; particularly associated with on-load release equipment; and to raise awareness of recent IMO Circulars on the subject.

718 ships were inspected during the campaign and 320 deficiencies related to lifeboats, their operation and maintenance issued. 10 of these deficiencies were detainable resulting in 6 ships being detained.

Detailed Results

Condition of Davits

Questions were asked and tests carried out to assess the condition of lifeboat davits. Although in 99.85% of cases records indicated that the davits were maintained and in good condition as per the ship ISM system requirements, a significant number were still found to have significant defects. 22 ships had defective davit limit switches while 12 ships had defective davit winch brakes – such defects have caused serious accidents in the past.

Condition of Lifeboats

Particular attention was paid to the attachments of the lifeboat lifting hooks to the boat structure. In 8 cases (1.2% of ships where this was applicable) these attachments were found to be in unsatisfactory condition; generally due to corrosion. In total, 147 deficiencies were found with lifeboats and their inventories including cracks in the hull, defects with seating arrangements, propulsion defects, equipment broken or missing and problems with lifeboat fall releases where fitted. Detainable deficiencies were found with lifeboat releases (3), launching arrangements (3), operational issues (3) and maintenance (1).

On-Load Releases

As many lifeboat accidents have been reported as involving the on-load release mechanism, the maintenance and operation of this equipment was a major part of this campaign.

Of the 485 ships inspected with lifeboats with on-load releases fitted:

- 33 (6.8%) cases were found where records did not indicate this equipment had been tested and maintained properly.
- 11 (2.3%) cases were found where ships crew could not demonstrate an understanding of the operation of this equipment.
- 21 (4.3%) ships were not provided with clear operating instructions and warning signs (as required by SOLAS and the LSA Code).

- 26 (5.4%) ships were found where the mechanism was not in a condition where crew members could clearly observe when the release mechanism was reset (as required by SOLAS and the LSA Code).
- 9 (1.9%) ships were found where the release mechanism was not clearly marked in a colour that contrasted with its surroundings (as required by SOLAS and the LSA Code).
- 8 (1.6%) ships were found where the AMSA surveyor felt that the operation of the mechanism did not require a “deliberate and sustained” action (as required by SOLAS and the LSA Code).

These results are particularly worrying as all of these factors could contribute to potentially fatal accidents.

To attempt to improve the safety of on-load releases and lifeboats in general, the IMO issued circular MSC/Circ.1093 “Guidelines for periodic servicing and maintenance of lifeboats, launching appliances and on-load release gear” in June 2003. On 65 ships inspected where these guidelines had some application it was found that they had not been implemented.

General Safety

The IMO in response to concerns about accidents with lifeboats issued circular MSC/Circ.1136 “Guidance on safety during abandon ship drills with lifeboats” in December 2004. One of the aims of the campaign was to raise awareness of this circular and the advice it contained. Alarming, 102 (16% of those where the circular was applicable) ships were not aware of this circular. Subsequently, on 84 ships no steps had been taken to identify the hazards associated with lifeboat drills or modify procedures to take account of any such hazards. In 20 cases it was felt that key personnel were not familiar with the procedures that *were* laid down in the ship’s existing safety management system.
