



SUB-COMMITTEE ON SHIP DESIGN AND
EQUIPMENT
51st session
Agenda item 9

DE 51/9
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COMPATIBILITY OF LIFE-SAVING APPLIANCES

Report of the Correspondence Group on Life-saving Appliances (LSA)

Submitted by the United States

SUMMARY

<i>Executive summary:</i>	This document informs the Sub-Committee of the intersessional LSA Correspondence Group's progress on its terms of reference with regard to compatibility of life-saving appliances.
<i>Action to be taken:</i>	Paragraph 12
<i>Related documents:</i>	DE 50/13/1; DE 50/13/2; DE 50/13/3; DE 50/27, paragraph 13.10; the LSA Code; and resolution MSC.81(70) (as amended through resolution MSC.226(82))

Introduction

1 The Sub-Committee, at its fiftieth session, established a Correspondence Group on Life-Saving Appliances to deal with various matters relating to life-saving appliances, including compatibility of life-saving appliances.

2 Participants from the following Member States participated in the work of the group:

BAHAMAS	JAPAN
CHINA	NETHERLANDS
DENMARK	NORWAY
DOMINICA	PANAMA
FINLAND	SINGAPORE
FRANCE	SWEDEN
GERMANY	UNITED KINGDOM
GREECE	UNITED STATES
ITALY	

Observers from the following non-governmental organizations also participated in the work:

INTERNATIONAL CHAMBER OF SHIPPING (ICS)
INTERNATIONAL ASSOCIATION OF CLASSIFICATION SOCIETIES (IACS)

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INTERNATIONAL LIFESAVING APPLIANCES MANUFACTURERS'
ASSOCIATION (ILAMA)
INTERNATIONAL ASSOCIATION OF INDEPENDENT TANKER OWNERS
(INTERTANKO)
CRUISE LINES INTERNATIONAL ASSOCIATION (CLIA)

- 3 The Sub-Committee instructed (DE 50/27, paragraph 13.10) the group to:
- .1 with regard to compatibility of life-saving appliances, prepare draft amendments to the LSA Code, on the basis of documents DE 50/13/1 and DE 50/13/2, and to the associated testing and evaluation procedures in the Revised recommendation on testing of life-saving appliances (resolution MSC.81(70), as amended through resolution MSC.226(82)), and consider the need to apply the underlying principle to other life-saving appliances;
 - .2 develop guidance concerning the wearing of immersion suits in totally enclosed lifeboats taking into account document DE 50/13/3; and
 - .3 submit a report to DE 51.

Assumed occupant weight for survival craft

4 Consistent with the decisions taken at DE 50, there was general support in the group for increasing the assumed weight of persons on cargo ship lifeboats to 82.5 kg, while retaining the existing 75 kg criterion for passenger ship lifeboats, taking into account that passenger ship demographics are generally a mix of men, women, and children of varying sizes. There were, however, no specific proposals to translate this weight increase into a corresponding increase in the specified size requirements (diagram in the LSA Code, paragraph 4.4.2.2.2). Comments suggested that seat width is adequate and that with regard to shoulder breadth, an “overlap” of shoulders might create some discomfort but no danger. It appears that without an increase in the seat size, the proposed weight increase for cargo ship lifeboats could be accomplished by simple amendments to LSA Code paragraphs 4.4.2.2.1 and 4.4.9.1 (markings):

“4.4.2 Carrying capacity of lifeboats

...

4.4.2.2 The number of persons which a lifeboat to be launched by falls shall be permitted to accommodate shall be equal to the lesser of:

- .1 the number of persons having an average mass of 75 kg (for a lifeboat intended for a passenger ship) or 82.5 kg (for a lifeboat intended for a cargo ship), all wearing lifejackets, that can be seated in a normal position without interfering with the means of propulsion or the operation of any of the lifeboat’s equipment; or

...

4.4.9 Lifeboat markings

4.4.9.1 The number of persons for which the lifeboat is approved, for passenger ships and cargo ships, as applicable, shall be clearly marked on it in clear permanent characters.”

5 The group generally agreed that any changes to the anthropometric criteria for davit-launched lifeboats should only apply to equipment installed on new ships per the usual practice under SOLAS. The existing provision for in-kind replacement in SOLAS regulation III/1.4.2 would address potential impacts on compatibility of launching appliances with survival craft.

6 The proposed increase in occupant weight for cargo ship lifeboats would require corresponding amendments to the following paragraphs of Part 1 of the recommendation on testing (resolution MSC.81(70), as amended) – 6.1.1 (general conditions), possibly 6.3.2 (overload test), and 6.7.1 (seating space test):

“6.1 Definitions and general conditions

6.1.1 Except as specified otherwise, the mass of an average person as used herein shall be taken to be 75 kg for a lifeboat intended for a passenger ship, or 82.5 kg for a lifeboat intended for a cargo ship.

...

6.3.2 The lifeboat should then be loaded with properly distributed weights to represent the fully equipped lifeboat loaded with the full complement of persons for the type of ship for which it is to be approved. The measurements required in 6.3.4 should again be made.

...

6.7 Lifeboat seating space test

6.7.1 The lifeboat should be fitted with its engine and its equipment. The number of persons for which the lifeboat is to be approved, having an average mass of 75 kg for a lifeboat intended for a passenger ship or 82.5 kg for a lifeboat intended for a cargo ship, and wearing a lifejacket and any other essential equipment, should be able to board the lifeboat and be properly seated within a period of 3 min in the case of a lifeboat intended for a cargo ship and as rapidly as possible in the case of a lifeboat intended for a passenger ship. ...”

7 The potential impacts, if any, on the 100 kg seat loading specified for the impact test (paragraph 6.4.1) and seating strength test (paragraph 6.6.1) require further discussion, as no specific proposals were submitted.

8 There were no specific proposals for adjusting the occupant weight criteria (LSA Code paragraphs 4.2.3.3 and 4.3.3.3), buoyancy criteria, or floor space criteria for liferafts consistent with the proposed changes for davit-launched lifeboats.

Potential impact on personal life-saving appliances

9 The group discussed whether changes to the requirements for personal life-saving appliances should be considered, but concluded that this should not be necessary since the performance requirements for this equipment are not based on a fixed size/weight criterion but rather are already defined and evaluated across a range of sizes and weights, including recently developed requirements for handling “oversize” persons.

Immersion suits in totally enclosed lifeboats

10 This item stems from document DE 50/13/3, where it was suggested that with the recent new requirement for carriage of immersion suits for all persons on cargo ships, regardless of carriage of totally enclosed lifeboats, there might be situations where the crew dons immersion suits in preparation for an emergency, then boards lifeboats with the suits on. However, the underlying reason for the new requirement was not to suggest that immersion suits should be worn in totally enclosed lifeboats, but rather to ensure that in cases where a ship sinks too quickly to board the lifeboats (as occurred in the casualties reported to IMO by Canada that led to the requirement), the crew at least has immersion suits available. At DE 50, the working group agreed, in light of lessons learned from the recent **MSC Napoli** casualty, that guidance concerning the wearing of immersion suits in totally enclosed lifeboats should be developed, with regard to the risk of dehydration and over-heating.

11 The group generally agreed that a brief MSC circular on the subject is the best solution. No specific proposals for content were submitted, however the correspondence group co-ordinator will prepare a working draft for circulation either as a comment paper or as a J paper for consideration at DE 51.

Action requested of the Sub-Committee

12 The Sub-Committee is invited to note the outcome of the group's discussions, and the proposed draft amendments to the LSA Code and the recommendation on testing of life-saving appliances, and to take action as appropriate.
