



SUB-COMMITTEE ON STANDARDS OF
TRAINING AND WATCHKEEPING
34th session
Agenda item 7

STW 34/7/2
20 December 2002
Original: ENGLISH

LARGE PASSENGER SHIP SAFETY

Submitted by the United States

SUMMARY

Executive summary: MSC 75 invited the STW Sub-Committee to consider the elements of the updated work plan developed by the Working Group on Large Passenger Ship Safety. Within these elements are objectives and tasks to evaluate large passenger ship manning as it relates to crew training for damage control. To assist the Sub-committee in its work, the United States has developed competencies in damage control, which can be included in international guidance and in developing training for those crewmembers assigned damage control duties on a muster list.

Action to be taken: Paragraph 6

Related documents: MSC 74/24, MSC 74/WP.6, MSC 75/24, MSC 75/WP.12, MSC 75/4/1, DE 45/13/1, DE 45/INF.2, SLF 44/11/1, STW 34/7

Introduction

1 The Maritime Safety Committee, at its seventy-fifth session, agreed to include in the work programme and the provisional agenda of the forthcoming session of the STW Sub-Committee additional guidance under the agenda item "Large Passenger Ship Safety" (MSC 75/24 paragraph 4.22 and annex 3 to document MSC 75/WP.12) and update the work plan for STW 34 (MSC 75/24 paragraph 4.23 and annex 4 to document MSC 75/WP.12). This updated guidance and tasking included six additional objectives and tasks under review of the human element with regard to operations, management and training with a view to improving safety on large passenger ships.

2 Included in the tasking is the evaluation of safe manning levels as they relate to the number of crew trained for emergency response on large passenger ships, specifically addressing appropriate training including containing damage and responding to flooding and collision damage (STW 34/7 annex 1 No. 7 paragraph 4.2). In reviewing this tasking, the United States researched the work previously done and proposals considered by the various Sub-committees. The review included the Gap Analysis of the existing regulatory framework for damage control (of) systems aboard large passenger ships conducted by the United States for submission to the Sub-Committee on Ship Design and Equipment (DE 45/13/1 and DE 45/INF.2). As reported in DE 45/13/1 the Gap Analysis was completed by an expert panel that evaluated the task in terms of the effectiveness of the existing IMO instruments with respect to existing passenger ships, and in light of projected changes in the passenger ship industry for future ships. When evaluating damage control systems the expert panel considered the crew as a component of the system, and

recommended the development of requirements for crew training in the damage control and repair of vital systems (MSC 75/4/1 paragraph 16). Details of the five-step process followed are described in DE 45/INF.2 (United States). A similar Gap Analysis was conducted by a separate expert panel to address the tasks assigned by MSC under the same agenda to the Sub-committee on Stability and Load Lines and on Fishing Vessels Safety (SLF). SLF 44/11/1 reported the results of this analysis. Regarding measures to limit the spread of flooding through watertight bulkhead penetrations and doors the panel noted that crew training requirements are not clearly written down nor is there a linkage in training to the required damage control plans (SLF 44/11/1 annex 1).

3 Based on these findings, the United States recommends the adoption of a minimum standard of competence for crew training when maintaining watertight integrity and conducting damage control. The standards can then be used in the development of training. This training would support the guiding philosophy, strategic goals and objectives adopted by MSC (MSC 75/WP.12, annex 1), particularly improving survivability of a large passenger ship (MSC 75/WP.12, annex 1, paragraph 1.2).

Discussion

4 In developing any training, the framework of the current regulations should be kept in mind as it is detailed in the Code of the International Convention for the Training, Certification and Watchkeeping of Seafarers, 1978, as amended (STCW). Training for crewmember competence in damage control should be appropriate for those shipboard duties to which the crewmember is assigned. The United States believes that this training should be comparable to the basic training seafarers receive in fire prevention and fire fighting as set out in table A-VI/1-2 of the STCW, when assigned fire fighting or fire safety duties on a muster list. For example, a seafarer assigned duties on an emergency squad with responsibilities in damage control should receive the appropriate level of training in maintaining watertight integrity and damage control as the crewmember assigned duties on a fire squad receives in fire fighting and fire safety.

5 In support of the recommendation in paragraph 3 and the discussion in paragraph 4 above, and to assist the STW Sub-Committee in their discussions, the United States developed a minimum standard of competence for a crewmember to meet the expected duties or responsibilities as a member of an emergency squad or when assigned duties on the muster list relating to the watertight integrity or damage control systems of a ship. This minimum standard of competence is presented in the annex. The table contains the knowledge, understanding and proficiencies (KUPs) to meet the competence along with the Methods for Demonstrating and the Criteria for Evaluating the competence.

Actions requested of the Sub-Committee

6 The Sub-Committee is invited to take note of the above discussion and recommendation, as well as the table in Annex 1, and take action as appropriate, including;

- .1 developing guidance as the minimum standard of competence for crewmembers when assigned emergency duties for maintaining watertight integrity and damage control on the muster list of a large passenger ship.
- .2 Using annex 1, develop training for crew members assigned emergency duties to maintain watertight integrity and conduct damage control on a large passenger ship.

ANNEX

**SPECIFICATION OF MINIMUM STANDARD OF COMPETENCE IN DAMAGE
CONTROL AND WATERTIGHT INTEGRITY**

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	METHODS FOR DEMONSTRATING COMPETENCE	CRITERIA FOR EVALUATING COMPETENCE
Minimize the risk of flooding and maintain a state of readiness to respond to emergency situations involving damage to the watertight integrity of the vessel	Shipboard damage control plans and organization Damage control systems, equipment (lockers) and emergency escape routes The basic elements in maintaining stability and watertight integrity Importance of securing flooding and maintaining Watertight boundaries Actions to be taken aboard a ship in an explosion, grounding, collision, or fire Damage Control techniques including shoring, patching and dewatering Bilge systems and pumps	Assessment of evidence obtained from approved instruction or attendance at an approved course	Initial actions on becoming aware of an emergency conform with accepted practices and procedures Action taken on identifying muster signals is appropriate to the indicated emergency and complies with established procedures