



SUB-COMMITTEE ON STANDARDS OF
TRAINING AND WATCHKEEPING
31st session
Agenda item 10

STW 31/10
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MEDICAL STANDARDS FOR SEAFARERS

Provisional proposals for physical abilities for entry-level seafarers

Note by the Secretariat

SUMMARY

Executive summary:	This document contains the provisional proposals for physical abilities for entry-level seafarers to be included in section B-I/9 of the STCW Code
Action to be taken:	Paragraph 5
Related documents:	STW 30/9, STW 30/13

1 At its thirtieth session, the Sub-Committee considered proposals for standards on physical abilities for entry-level seafarers developed by the United States (STW 30/9, annex). The proposals, in tabular format, broadly described typical shipboard tasks, functions, events and conditions and linked each one to a corresponding physical ability considered necessary for the safety of the seafarer on board ship at sea.

2 The Sub-Committee, whilst agreeing that there was a need for the development of these standards and that the United States' proposals formed a good basis for discussion, noted that delegations did not have the expertise necessary to discuss the issue in-depth and invited members to submit comments and information for consideration at STW 31. The Sub-Committee also instructed the Secretariat to invite representatives from ILO and WHO to attend the meeting.

3 The Secretariat has invited the representatives of ILO and WHO to attend the thirty-first session of the Sub-Committee.

4 In order to facilitate continued consideration of the proposed standards, the table developed by the United States is given at annex.

Action requested of the Sub-Committee

5 The Sub-Committee is invited to take note of the information provided and decide as appropriate.

ANNEX

PROPOSED PHYSICAL ABILITIES FOR ENTRY-LEVEL SEAFARERS

(This text is proposed as new paragraphs and a table to be included in section B-1/9 of the STCW Code. It can appropriately be inserted immediately following paragraph 11, with a consequential adjustment in the numbering of the subsequent paragraphs).

Physical abilities for entry-level seafarers

1 The following table describes (a) ordinary shipboard tasks, functions, events and conditions, (b) a corresponding physical ability which is considered necessary for the safety of a seafarer who is living and working on board a ship at sea, and (c) a guideline for measuring the corresponding physical ability. Administrations should take these physical abilities into account when establishing medical fitness standards for entry-level seafarers when they are first beginning employment or commencing service on board seagoing ships.

2 This table is not intended to address all possible shipboard conditions, or all potentially disqualifying medical conditions; and it should therefore be used only as general guidance. Administrations should determine the categories of entry-level seafarers who are to be subject to an assessment of physical ability for service on seagoing ships, taking into account the nature of the shipboard work for which they will be employed. For example, full application of these guidelines may not be appropriate in the case of "entertainers" who are not assigned duties on the muster list. Also, special circumstances surrounding individual cases, as well as any known risks of permitting the individual to be employed on board ship, and the extent to which a limited ability might be accommodated in a given situation, should be given full consideration.

Table B-I/9-1

Physical abilities for entry level seafarers

Note: The term "emergency response procedures" as used in this table is intended to cover all standard emergency response evolutions such as abandon ship and fire-fighting, as well as the basic procedures to be followed by each seafarer to enhance his or her personal survival to avoid creating situations where special assistance from other crewmembers would be required. The term "assistance" means the use of another person to accomplish the task.

SHIPBOARD TASK, FUNCTION, EVENT OR CONDITION	RELATED PHYSICAL ABILITY	MEASUREMENT Be able to:
Rolling seas (+/- 10°); slippery and uneven surfaces; risk of injury	Maintain balance (equilibrium)	Without assistance or aids, walk a straight line heel to toe, for 10 steps with eyes open.
Routine access between levels; emergency response procedures	Climb up and down vertical ladders	Without assistance, climb up and down a vertical ladder with rungs spaced not more than 30 cm apart for a distance of 5 meters within 1 minute.
Routine access between levels; emergency procedures	Walk up and down stairs (or inclined ladders)	Without assistance, walk up and down a stairway for a distance of 5 meters with a vertical rise of treads not exceeding 30 cm apart within 1 minute.
Routine movement between spaces and compartments; emergency response procedures	Step over coamings (e.g., up to 60 cm in height)	Without assistance, be able to step over a 60 cm high door sill (coaming).
Open and close watertight doors; hand cranking systems, open and close valve wheels; handle lines, use hand tools (i.e., spanners, fire axes, valve wrenches, hammers, screwdriver, pliers)	Manipulate mechanical devices (manual and digital dexterity, and strength)	Grasp, lift and manipulate various common shipboard tools; move hands/arms to open and close valve wheels in vertical and horizontal directions; rotate wrists to turn handles. The required range of motion is 90 degrees.
Access throughout ship; use tools and equipment; emergency response procedures must be followed promptly, including donning of life jacket or exposure suit	Move with agility	Don a lifejacket in 2 minutes or an immersion suit in 3 minutes. (Note: this requires physical ability; but the measure of proficiency for basic safety training may be more demanding).
Access between spaces; follow emergency response procedures	Work in and move through constricted spaces	Move through a restricted space without becoming immobilized or incapacitated. (A restricted space is defined as having an opening of 60cm x 60cm).
Handle ship's stores; use tools and equipment; handle lines; follow emergency response procedures	Lift, pull, push and carry a load; squat and bend at knees	Properly lift a single object with a minimum weight of 25 kg and carry it a minimum distance of 5 meters.
Making rounds; contributing to watchkeeping arrangements	Stand and walk for extended periods	Stand and walk for a period of not less than 4 hours.

SHIPBOARD TASK, FUNCTION, EVENT OR CONDITION	RELATED PHYSICAL ABILITY	MEASUREMENT Be able to:
Overhead storage; opening and closing valves	Reach above shoulder height	Raise an object with a minimum weight of 10 kg to a shelf located above the candidate's head.
General ship's maintenance; emergency response procedures, including damage control	Crouch, kneel, stoop	Crouch (lowering height by bending knees) Kneel (placing knees on ground) Stoop (lowering height by bending at the waist).
Emergency response procedures, including; escape from smoke filled spaces	Crawl; feel	Crawl (the ability to move the body with hands and knees). Feel (the ability to handle or touch to examine or determine differences in temperature).
React to visual alarms, warnings, and instructions; emergency response procedures	See	Distinguish an object or shape at a certain distance, as may be specified by the competent authority.
React to audible alarms and instructions; emergency response procedures	Hear	Hear a specified dB sound at a specified frequency, as may be specified by the competent authority.
Detection of smoke and hazardous odours	Smell	Distinguish between odours and the lack of odours, as may be specified by the competent authority.
Make verbal reports or call attention to suspicious or emergency conditions	Observe and speak	Describe immediate surroundings and activities, and pronounce words clearly, as may be specified by the competent authority.