

**RESOLUTION A.623(15)**

*Adopted on 19 November 1987  
Agenda item 12*

**MINIMUM REQUIREMENTS FOR CERTIFICATION OF  
CHIEF ENGINEER OFFICERS AND SECOND ENGINEER OFFICERS OF  
FISHING VESSELS POWERED BY MAIN PROPULSION MACHINERY OF  
750 kW PROPULSION POWER OR MORE**

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety,

NOTING regulation V/13 of the International Convention for the Safety of Life at Sea, 1974, which requires Contracting Governments to undertake, each for its national ships, to maintain or, if necessary, to adopt measures for the purpose of ensuring that from the point of view of safety of life at sea all ships shall be sufficiently and efficiently manned,

CONSIDERING that the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, is not applicable to fishing vessels,

CONSIDERING ALSO resolution 8 of the International Conference on Safety of Fishing Vessels, 1977, which invites the Organization to consider training and certification of crews of fishing vessels,

DESIRING to promote safety of life at sea and protection of the marine environment,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its fifty-second session,

1. ADOPTS the Recommendation on Minimum Requirements for Certification of Chief Engineer Officers and Second Engineer Officers of Fishing Vessels Powered by Main Propulsion Machinery of 750 kW Propulsion Power or More set out in the Annex to this resolution;
2. URGES Member Governments to implement the Recommendation;
3. REQUESTS the Maritime Safety Committee to keep the Recommendation under review and to report as necessary to the Assembly.

ANNEX

**RECOMMENDATION ON MINIMUM REQUIREMENTS FOR CERTIFICATION OF  
CHIEF ENGINEER OFFICERS AND SECOND ENGINEER OFFICERS OF  
FISHING VESSELS POWERED BY MAIN PROPULSION MACHINERY  
OF 750 kW PROPULSION POWER OR MORE**

1. Every chief engineer officer and second engineer officer serving on a seagoing fishing vessel powered by main propulsion machinery of 750 kW propulsion power or more should hold an appropriate certificate.

- 2 Every candidate for certification should:
  - .1 be not less than 18 years of age;
  - .2 satisfy the Administration as to medical fitness, including eyesight and hearing;
  - .3 for certification as second engineer officer, have not less than 12 months approved seagoing service in the engine-room on fishing vessels; however, this period may be reduced to not less than 6 months if the Administration requires special training which it considers to be equivalent to the approved seagoing service it replaces;
  - .4 for certification as chief engineer officer, have not less than 24 months approved seagoing service on fishing vessels of which not less than 12 months should be served while qualified to serve as second engineer officer;
  - .5 have attended an approved practical fire-fighting course; and
  - .6 have passed an appropriate examination to the satisfaction of the Administration. Such examination should include the material set out in the appendix to this Recommendation, except that the Administration may vary the requirements for examination and seagoing service for officers of fishing vessels engaged in voyages in limited waters bearing in mind the power of the propulsion machinery and the effect on the safety of all fishing vessels which may be operating in the same waters.
- 3 The approved seagoing service prescribed in 2.3 and 2.4 may be replaced by approved seagoing service in the engine-room on merchant ships.
- 4 Training to achieve the necessary theoretical knowledge and practical experience should take into account relevant international regulations and recommendations.
- 5 The level of knowledge required under the different paragraphs of the appendix may be varied according to whether the certificate is being issued at chief engineer officer or second engineer officer level.

## **APPENDIX**

### **MINIMUM KNOWLEDGE REQUIRED FOR CERTIFICATION OF CHIEF ENGINEER OFFICERS AND SECOND ENGINEER OFFICERS OF FISHING VESSELS POWERED BY MAIN PROPULSION MACHINERY OF 750 kW PROPULSION POWER OR MORE**

- 1 The syllabus given below is compiled for examination of candidates for certification as chief engineer officer or second engineer officer of fishing vessels powered by main propulsion machinery of 750 kW propulsion power or more. Bearing in mind that a second engineer officer should be in a position to assume the responsibilities of the chief engineer officer at any time, examination in these subjects should be designed to test the candidate's ability to assimilate all available information that affects the safe operation of the fishing vessel's machinery.
- 2 With respect to paragraphs 3.4 and 4.1 below, the Administration may omit knowledge requirements for types of propulsion machinery other than machinery installations for which the certificate to be awarded is to be valid. A certificate awarded on such a basis should

not be valid for any category of machinery installation which has been omitted until the engineer officer proves to be competent in these items to the satisfaction of the Administration. Any such limitation should be stated in the certificate.

3 Every candidate should possess sufficient elementary theoretical knowledge to understand the basic principles involved in the following subjects:

- .1 combustion processes;
- .2 heat transmission;
- .3 mechanics and hydromechanics;
- .4 as appropriate:
  - .4.1 marine diesel engines;
  - .4.2 marine steam propulsion plant;
  - .4.3 marine gas turbines;
- .5 steering gear systems;
- .6 properties of fuels and lubricants;
- .7 properties of materials;
- .8 fire-extinguishing agents;
- .9 marine electrical equipment;
- .10 automation, instrumentation and control systems;
- .11 fishing vessel construction, including stability and damage control;
- .12 auxiliary systems; and
- .13 refrigeration systems.

4 Every candidate should possess adequate practical knowledge in at least the following subjects:

- .1 operation and maintenance of, as appropriate:
  - .1.1 marine diesel engines;
  - .1.2 marine steam propulsion plant;
  - .1.3 marine gas turbines;
- .2 operation and maintenance of auxiliary machinery systems, including steering gear systems;
- .3 operation, testing and maintenance of electrical and control equipment;
- .4 maintenance of catch handling equipment and deck machinery;
- .5 detection of machinery malfunction, location of faults and action to prevent damage;
- .6 organization of safe maintenance and repair procedures;

- .7 methods of, and aids for, fire prevention, detection and extinction;
- .8 regulations to be observed regarding operational or accidental pollution of the marine environment and methods and aids to prevent such pollution;
- .9 first aid related to injuries which might be expected in machinery spaces and use of first aid equipment;
- .10 functions and use of life-saving appliances;
- .11 methods of damage control with specific reference to action to be taken in the event of flooding of seawater into the engine-room; and
- .12 safe working practices.

5 Every candidate should possess a knowledge of international maritime law as embodied in international agreements and conventions as they affect the specific obligations and responsibilities of the engine department, particularly those concerning safety and the protection of the marine environment. The extent of knowledge of national maritime legislation is left to the discretion of the Administration but should include national arrangements for implementing international agreements and conventions.

6 Every candidate should possess a knowledge of personnel management, organization and training aboard fishing vessels.