



MARINE DEPARTMENT
GOVERNMENT OF THE HONG KONG
SPECIAL ADMINISTRATIVE REGION

**Certificates of Proficiency
for Engine Room Watch Ratings' Determinations**

and

**Certificates of Proficiency
for Electro-technical Ratings' Determinations**

(2016 Edition)

Made under Section 5A of the
Merchant Shipping (Seafarers) (Engine Room Watch Ratings)
Regulation (Cap.478V)

Marine Department
The Hong Kong Special Administrative Region

First Edition 2016

MERCHANT SHIPPING (SEAFARERS) ORDINANCE
(CHAPTER 478)

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SECTION 1

COMMENCEMENT, INTERPRETATION & GENERAL REQUIREMENTS

1.1 Commencement

- 1.1.1 The Certificates of Proficiency for Engine Room Watch Ratings' Determinations and the Certificates of Proficiency for Electro-technical Ratings' Determinations (the Determinations) are made by the Seafarers' Authority (hereafter referred to as "the Authority") under powers granted by the Merchant Shipping (Seafarers) (Engine Room Watch Ratings) Regulation (Cap.478V) and are the first edition that shall be effected on 1 December 2016.

1.2 Interpretation

- 1.2.1 In the Determinations, unless the context otherwise requires:

"approved" means approved or recognized by the Director of Marine;

"Authority" means the Seafarers' Authority established by section 4(1) of the Merchant Shipping (Seafarers) Ordinance, Cap.478. For the purposes of the Determinations, Director of Marine is the Authority;

"Convention" means the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as from time to time revised or amended by any revision or amendment to any provision of such Convention that applies to Hong Kong;

"Director" means the Director of Marine;

"rating" means a seafarer other than –

- (a) the master;
- (b) an officer; or
- (c) a seafarer not directly connected with the normal manning of the ship;

"registered person" means a person whose name is entered in the register kept pursuant to section 7 of the Merchant Shipping (Seafarers) Ordinance, Cap.478;

"STCW Code" means the Seafarers' Training, Certification and Watchkeeping Code published by the International Maritime Organization, as from time to time revised or amended by any revision or amendment to any provision of such Code that applies to Hong Kong.

1.3 General Requirements

- 1.3.1 The subsequent sections of the Determinations set out the training and qualification requirements for engine room watch ratings and electro-technical ratings and the conditions to be satisfied by any person to qualify for a certificate of proficiency, the manner in which the attainment of such standards or the satisfaction of such conditions

is to be established, the procedure for the application and issue of a certificate of proficiency.

1.3.2 Any person who feels aggrieved by any decision of the Authority to refuse to issue a certificate of proficiency, may appeal against the decision to the Administrative Appeals Board within 30 days of being informed of such decision.

1.3.3 The Director may, at his discretion, permit exemption from any or all of the provisions of the Determinations.

1.4 Transitional Provisions

1.4.1 A certificate is treated as a Certificate of Proficiency for Engine Room Watch Ratings issued under section 4A of the Merchant Shipping (Seafarers) (Engine Room Watch Ratings) Regulation (Cap.478V) during the transitional period if the certificate -
(a) is issued or deemed to have been issued under the pre-amended Regulation; and
(b) is valid immediately before 1 December 2016.

1.4.2 During the transitional period, a contravention of section 4(3) does not constitute an offence under section 6 of the Merchant Shipping (Seafarers) (Engine Room Watch Ratings) Regulation (Cap.478V).

1.4.3 In this section –
pre-amended Regulation means the Merchant Shipping (Seafarers) (Engine Room Watch Ratings) Regulation (Cap. 478V) in force immediately before 1 December 2016;

transitional period means the period beginning on 1 December 2016 and ending on 31 December 2016.

SECTION 2

CERTIFICATES OF PROFICIENCY

GENERAL PROVISIONS

2.1 Certificates of Proficiency

2.1.1 Certificate of Proficiency means any of the following certificates issued under the Merchant Shipping (Seafarers) (Engine Room Watch Ratings) Regulation (Cap.478V)

-
- (a) Certificate of Proficiency for Engine Room Watch Ratings; and
- (b) Certificate of Proficiency for Electro-technical Ratings.

2.2 Application

2.2.1 The applicant for a certificate of proficiency must complete an application form which may be obtained from the Marine Department, Seafarers' Certification Section, or by post from:

Marine Department
Seafarers' Certification Section
3/F Harbour Building
38 Pier Road
Central
Hong Kong

The application form could also be downloaded from the Marine Department's website (<http://www.mardep.gov.hk/en/forms/home.html>).

2.2.2 Applicants should return the completed application form to the Seafarers' Certification Section together with the documents as stated in the application form.

2.2.3 The application must be accompanied by any evidence as may be necessary to establish that the requirements and conditions for the issue of the certificate being applied for have been satisfied.

2.2.4 It is important that the correct procedure for application is followed as discharges may have to be forwarded for verification which can take time, and in the absence of such verification the application cannot be processed.

2.3 Enquiries

2.3.1 Applicants may make enquiries about their application and when doing so, should ensure that the point on which information is sought is clearly stated. Enquiries should be addressed to:

Seafarers' Certification Section
Marine Department

3/F Harbour Building
38 Pier Road
Central
Hong Kong

Tel. No. : (852) 2852 4368
Fax No. : (852) 2541 6754
E-mail : sscrt@mardep.gov.hk

2.4 Particulars of Sea Service

- 2.4.1 An applicant's eligibility for a certificate of proficiency will depend, amongst other factors, on the amount of sea service performed and upon the seagoing ranks in which the applicant has served. It is, therefore, imperative that the particulars which applicants enter on the application form are accurately stated.
- 2.4.2 The amount of sea service set down in the Determinations for the certificate of proficiency is the **absolute minimum** that can be accepted. Unless applicants can prove the full amount they will not be issued with a certificate.

2.5 Use of Information

- 2.5.1 Information required by the application form will be used by Marine Department for the process of application for and issue of certificate. This information may be divulged to other departments and agencies authorised to process the information for the mentioned purposes. Limited personal data of successful applicant may be used via the Marine Department's website for verification of the issued certificate of proficiency by any third parties.
- 2.5.2 Supply of information is obligatory. An applicant should ensure that all the information filled in the application form is accurate. Failure to do so may, besides subject to paragraph 2.6, result in an unsuccessful application.
- 2.5.3 For making correction and access to personal data after submission of application form, an applicant may contact the following officer:

Officer-in-charge
Marine Department
Seafarers' Certification Section
3/F Harbour Building
38 Pier Road
Central
Hong Kong

2.6 Fraud or Misrepresentation

- 2.6.1 Applicants are reminded that the Merchant Shipping (Seafarers) (Engine Room Watch Ratings) Regulation (Cap.478V) provides that any person who, in connection with an application for the issue of a certificate of proficiency:

- (a) makes a false pretence; or
- (b) supplies false information,

knowing it to be false, or not believing it to be true, commits an offence and is liable, amongst other things, to a fine and to imprisonment.

2.7 Attempted Bribery

- 2.7.1 Any applicant who offers an advantage to any officer of the Marine Department shall be guilty of an offence under the Prevention of Bribery Ordinance and shall be liable on summary conviction to a fine and to imprisonment. Such an applicant will not be issued with a certificate for such a period as may be decided by the Director.

2.8 Quality Standards

- 2.8.1 The education and training courses which an applicant attends to satisfy the training requirements for the issue of a certificate of proficiency shall generally follow a quality standards system or an alternative system acceptable to the Director. A list of the approved training courses can be found at the Marine Department's website (http://www.mardep.gov.hk/en/pub_services/exam.html).

2.9 Issue of Certificates

- 2.9.1 Applicants who are successful in meeting all the requirements for the issue of a certificate of proficiency being applied for, will be issued with a certificate of proficiency. When the certificate is ready it will be forwarded by registered post to the applicant's address as given on the application form, unless the applicant wishes to make other arrangements.
- 2.9.2 To avoid unnecessary delays in the issue of certificates, it is important that applicants should inform the Marine Department promptly of any change to the address given on the application form.

2.10 Fees

- 2.10.1 Applicants for the certificate of proficiency will be required to pay the prescribe fee (presently the fee is NIL) before any steps are taken to verify their eligibility for the issue of the certificate.

2.11 Issue of Replacement Certificate

- 2.11.1 If a certificate of proficiency is lost, destroyed, damaged or defaced, the holder may apply to the Seafarers' Certification Section for a replacement certificate. A fee will be charged (presently the fee is HK\$ 155) for the replacement certificate unless the holder can show that the certificate was lost as a result of shipwreck or fire on board ship. An applicant for a replacement certificate will be required to make a declaration to the Officer-in-charge of the Seafarers' Certification Section regarding the circumstances

in which the certificate was lost. Upon the issue of a copy certificate, the certificate that was lost, destroyed, damaged or defaced ceases to be valid.

SECTION 3

SEA SERVICE

3.1 General

- 3.1.1 This section specifies provisions relating to qualifying sea service.
- 3.1.2 Except where otherwise specified, the qualifying sea service required for any certificate of proficiency is the service performed in ships which proceed to sea and which are actively engaged in commercial trading.
- 3.1.3 Qualifying sea service means time spent on board ship reckoned from the date of engagement to the date of discharge. Subject to verification, as and when necessary, certificates of discharge will be accepted as proof of sea service.
- 3.1.4 Proof of sea service for applicants serving on Hong Kong registered ships can be verified by the Mercantile Marine Office of Marine Department. Sea service on other ships must be confirmed by the Master(s) of the ship(s) concerned, or by the Consul or other recognized authority of the flag State. However, such confirmation will not necessarily be deemed sufficient.
- 3.1.5 Calculations of voyage length for the purpose of establishing sea service should be made in calendar months and days. When it happens that an applicant has signed off and signed on again on the same day, that day may only be counted once. To calculate total sea service, the length of each voyage should be added together in months and days. The total of days should then be divided by 30 to give months, and residual days. The months should then be added as the total months.

SECTION 4

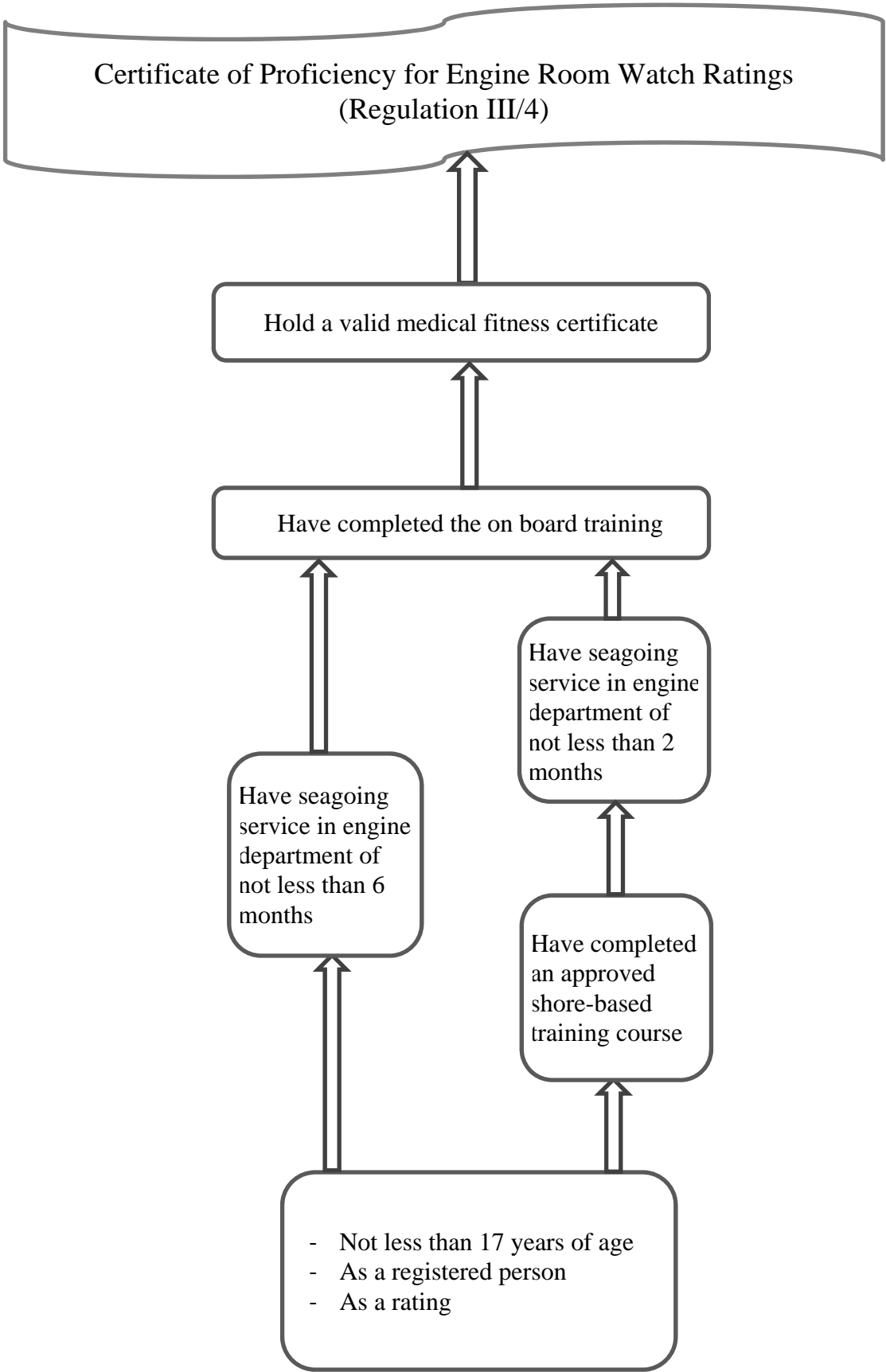
QUALIFYING REQUIREMENTS

4.1 Certificate of Proficiency for Engine Room Watch Ratings

4.1.1 To qualify for the issue of a Certificate of Proficiency for Engine Room Watch Ratings in Hong Kong, an applicant must:

- (a) be a registered person;
- (b) be a rating;
- (c) be not less than 17 years of age;
- (d) have completed the on board training record for the issue of a Certificate of Proficiency for Engine Room Watch Ratings;
- (e) have completed:
 - (i) approved seagoing service including not less than six months of training and experience, or
 - (ii) special training, either pre-sea or on board ship, including an approved period of seagoing service which shall not be less than two months; and
- (f) have met the standard of competence specified in section A-III/4 of the STCW Code (standard of competence is shown in the Appendix I).

4.1.2 The seagoing service, training and experience required by section 4.1.1(e)(i) and 4.1.1(e)(ii) must be associated with engine-room watchkeeping functions and involve the performance of duties carried out under the direct supervision of a qualified engineer officer or a qualified rating.



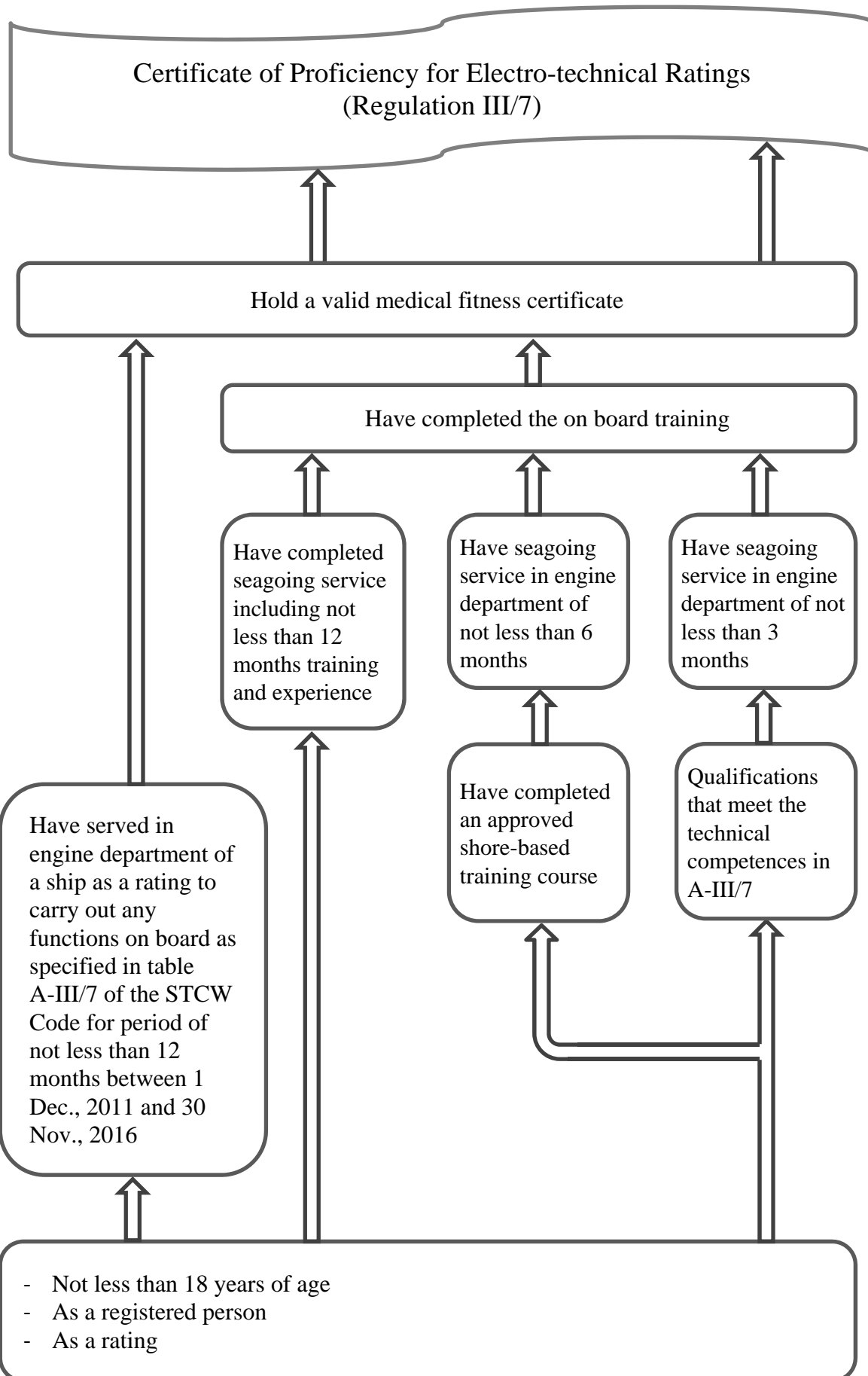
4.2 Certificate of Proficiency for Electro-technical Ratings

4.2.1 To qualify for the issue of a Certificate of Proficiency for Electro-technical Ratings in Hong Kong, an applicant must:

- (a) be a registered person;
- (b) be a rating;
- (c) be not less than 18 years of age; and
- (d) (I) (i) have completed the on board training record for the issue of a Certificate of Proficiency for Electro-technical Ratings;
- (ii) have completed approved seagoing service including not less than 12 months training and experience; or
- (iii) have completed approved training, including an approved period of seagoing service which must not be less than 6 months; or
- (iv) have qualifications that meet the technical competences in table A-III/7 and an approved period of seagoing service, which must not be less than 3 months; and
- (v) have met the standard of competence specified in section A-III/7 of the STCW Code (standard of competence is shown in the Appendix II);

or

- (II) have worked in the engine department of a ship as a rating to carry out any functions on board as specified in table A-III/7 of the STCW Code for an aggregate period of not less than 12 months within the period beginning on 1 December 2011 and ending on 30 November 2016.



4.3 Medical Fitness Certificate

- 4.3.1 Proof of medical fitness is an essential requirement for the issue of any certificate of proficiency. Medical fitness may be proven by the production of a certificate of medical fitness issued not more than two years beforehand by an approved medical practitioner.
- 4.3.2 Applicants in Hong Kong may obtain from the Seafarers' Certification Section a list of medical practitioners who are approved by the Director to issue medical fitness certificates. The list could also be downloaded from the Marine Department's website.

SECTION 5

ON BOARD TRAINING

5.1 On Board Training Record Book

5.1.1 Conditions stated in paragraph 4.1.1(d) and 4.2.1(d)(I)(i) requires rating to complete an on board training and is documented in an approved training record book. On board training programme including all the elements listed in paragraph 5.1.3 for engine room ratings, or in paragraph 5.1.4 for electro-technical rating trainee, and the record of the training conducted in accordance with such programme are acceptable to the Director as the approved ones. Such training record book can be one prepared by seafarer's companies or training institutes as well as one published by maritime organizations.

5.1.2 A rating with his on board training falls short of the required training elements will be required to compensate by additional seagoing service, training courses or assessment as determined by the Director.

5.1.3 With respect to the paragraph 2.3 of Regulation III/4 of the STCW Convention, the supervised on board training should at least cover the following elements:

- (a) Safety and Shipboard Familiarization
 - (i) Watchkeeping procedures and arrangements
 - (ii) Safety and emergency procedure
 - (iii) Environmental protection
- (b) Carry out a watch routine appropriate to the duties of a rating forming part of an engine room watch; understand orders and be understood in matters relevant to watchkeeping duties
 - (i) Use correct terms in machinery spaces and names of machinery and equipment
 - (ii) Conduct engine room watchkeeping procedures
 - (iii) Use safe working practices as related to engine room operations
 - (iv) Practice basic environmental protection procedures
 - (v) Use of appropriate internal communication system
 - (vi) Test engine room alarm systems and ability to distinguish between the various alarms, with special reference to fire-extinguishing gas alarms
- (c) Maintain the correct water levels and steam pressures (for keeping a boiler watch)
 - (i) Safe operation of boilers
- (d) Operate emergency equipment and apply emergency procedures
 - (i) Demonstrate emergency duties
 - (ii) Use escape routes from machinery spaces
 - (iii) Demonstrate familiarity with the location and use of fire-fighting equipment in the machinery spaces

5.1.4 With respect to the paragraph 2.3 of Regulation III/7 of the STCW Convention, the supervised on board training should at least cover the following elements:

- (a) Safety and Shipboard Familiarization
 - (i) Watchkeeping procedures and arrangements

- (ii) Safety and emergency procedure
- (iii) Environmental protection
- (b) Safe use of electrical equipment
 - (i) Safe use and operation of electrical equipment, including safety precautions before commencing work or repair
 - (ii) Safe use and operation of electrical equipment, including isolation procedures
 - (iii) Safe use and operation of electrical equipment, including emergency procedures
 - (iv) Safe use and operation of electrical equipment, including different voltages on board
 - (v) Knowledge of the causes of electric shock and precautions to be observed to prevent shock
- (c) Contribute to monitoring the operation of electrical systems and machinery
 - (i) Basic knowledge of the operation of mechanical engineering systems including prime movers, main propulsion plant
 - (ii) Basic knowledge of the operation of mechanical engineering systems including engine room auxiliary machineries
 - (iii) Basic knowledge of the operation of mechanical engineering systems including steering systems
 - (iv) Basic knowledge of the operation of mechanical engineering systems including cargo-handling systems
 - (v) Basic knowledge of the operation of mechanical engineering systems including deck machineries
 - (vi) Basic knowledge of the operation of mechanical engineering systems including hotel systems
 - (vii) Basic knowledge of electro-technology and electrical machines theory
 - (viii) Basic knowledge of electrical power distribution boards and electrical equipment
 - (xi) Basic knowledge of fundamentals of automation, automatic control systems and technology
 - (x) Basic knowledge of instrumentation, alarm and monitoring systems
 - (xi) Basic knowledge of electrical drives
 - (xii) Basic knowledge of electrohydraulic and electro-pneumatic control systems
 - (xiii) Basic knowledge of coupling, load sharing and changes in electrical configuration
- (d) Use hand tools, electrical and electronic measurement equipment for fault finding, maintenance and repair operations
 - (i) Safety requirements for working on shipboard electrical systems
 - (ii) Application of safe working practices
 - (iii) Basic knowledge of construction and operational characteristics of shipboard AC and DC systems and equipment
 - (iv) Basic knowledge of use of measuring instruments, machine tools, and hand and power tools
- (e) Contribute to shipboard maintenance and repair
 - (i) Ability to use lubrication and cleaning materials and equipment
 - (ii) Knowledge of safe disposal of waste materials
 - (iii) Ability to understand and execute routine maintenance and repair procedures
 - (iv) Understanding manufacturer's safety guidelines and shipboard instructions

- (f) Contribute to the maintenance and repair of electrical systems and machinery on board
 - (i) Safety and emergency procedures
 - (ii) Basic knowledge of electro-technical drawings and safe isolation of equipment and associated systems required before personnel are permitted to work on such plant or equipment
 - (iii) Test, detect faults and maintain and restore electrical control equipment and machinery to operating condition
 - (iv) Electrical and electronic equipment operating in flammable areas
 - (v) Basics of ship's fire-detection system
 - (vi) Carrying out safe maintenance and repair procedures
 - (vii) Detection of machinery malfunction, location of faults and action to prevent damage
 - (viii) Maintenance and repair of lighting fixtures and supply
- (g) Contribute to the handling of stores
 - (i) Knowledge of procedures for safe handling, stowage and securing of stores
- (h) Apply precautions and contribute to the prevention of pollution of the marine environment
 - (i) Knowledge of the precautions to be taken to prevent pollution of the marine environment
 - (ii) Knowledge of use and operation of antipollution equipment/agents
 - (iii) Knowledge of approved methods for disposal of marine pollutants
- (i) Apply occupational health and safety procedures
 - (i) Working knowledge of safe working practices and personal shipboard safety, including electrical safety
 - (ii) Working knowledge of safe working practices and personal shipboard safety, including lockout/tag-out
 - (iii) Working knowledge of safe working practices and personal shipboard safety, including mechanical safety
 - (iv) Working knowledge of safe working practices and personal shipboard safety, including permit to work systems
 - (v) Working knowledge of safe working practices and personal shipboard safety, including working aloft
 - (vi) Working knowledge of safe working practices and personal shipboard safety, including working in enclosed spaces
 - (vii) Working knowledge of safe working practices and personal shipboard safety, including lifting techniques and methods of preventing back injury
 - (viii) Working knowledge of safe working practices and personal shipboard safety, including chemical and biohazard safety
 - (ix) Working knowledge of safe working practices and personal shipboard safety, including personal safety equipment

5.1.5 The training record book should also contain the following information:

- (a) Personal information of the candidate for certification, such as name, date of birth, residential address, seaman discharge book no. etc.
- (b) Company(ies) information which the candidate has been served such as company name, company address, service period for the particular training programme etc.

- (c) Ship(s) information which the candidate has been served such as ship's name, IMO Number, ship's type, ship's major particulars, engine particulars, lifesaving and firefighting equipment, cargo gears, navigational equipment etc.

APPENDIX I

STANDARDS OF COMPETENCE FOR RATINGS FORMING PART OF AN ENGINEERING WATCH

- Function (1): Marine Engineering at the Support Level
- Competence (i): Carry out a watch routine appropriate to the duties of a rating forming part of an engine-room watch
- Understand orders and be understood in matters relevant to watchkeeping duties

Content of Assessment	Criteria for Satisfactory Assessment
<p>Terms used in machinery spaces and names of machinery and equipment</p> <p>Engine-room watchkeeping procedures</p> <p>Safe working practices as related to engine-room operations</p> <p>Basic environmental protection procedures</p> <p>Use of appropriate internal communication system</p> <p>Engine-room alarm systems and ability to distinguish between the various alarms, with special reference to fire-extinguishing gas alarms</p>	<p>Communications are clear and concise and advice or clarification is sought from the officer of the watch where watch information or instructions are not clearly understood</p> <p>Maintenance, handover and relief of the watch is in conformity with accepted principles and procedures</p>

- Competence (ii): For keeping a boiler watch:
Maintain the correct water levels and steam pressures

Content of Assessment	Criteria for Satisfactory Assessment
<p>Safe operation of boilers</p>	<p>Assessment of boiler condition is accurate and based on relevant information available from local and remote indicators and physical inspections</p> <p>The sequence and timing of adjustments maintains safety and optimum efficiency</p>

- Competence (iii): Operate emergency equipment and apply emergency procedures

Content of Assessment	Criteria for Satisfactory Assessment
<p>Knowledge of emergency duties</p> <p>Escape routes from machinery spaces</p> <p>Familiarity with the location and use of fire-fighting equipment in the machinery spaces</p>	<p>Initial action on becoming aware of an emergency or abnormal situation conforms with established procedures</p> <p>Communications are clear and concise at all times and orders are acknowledged in a seamanlike manner</p>

APPENDIX II

STANDARDS OF COMPETENCE FOR ELECTRO-TECHNICAL RATINGS

Function (1): Electrical, Electronic and Control Engineering at the Support Level

Competence (i): Safe use of electrical equipment

Content of Assessment	Criteria for Satisfactory Assessment
<p>Safe use and operation of electrical equipment, including:</p> <ul style="list-style-type: none"> .1 safety precautions before commencing work or repair .2 isolation procedures .3 emergency procedures .4 different voltages on board <p>Knowledge of the causes of electric shock and precautions to be observed to prevent shock</p>	<p>Understands and follows safety instructions of electrical equipment and machinery</p> <p>Recognizes and reports electrical hazards and unsafe equipment</p> <p>Understands safe voltages for hand-held equipment</p> <p>Understands risks associated with high-voltage equipment and onboard work</p>

Competence (ii): Contribute to monitoring the operation of electrical systems and machinery

Content of Assessment	Criteria for Satisfactory Assessment
<p>Basic knowledge of the operation of mechanical engineering systems, including:</p> <ul style="list-style-type: none"> .1 prime movers, including main propulsion plant .2 engine-room auxiliary machineries .3 steering systems .4 cargo-handling systems .5 deck machineries .6 hotel systems <p><i>Basic knowledge of:</i></p> <ul style="list-style-type: none"> .1 electro-technology and electrical machines theory .2 electrical power distribution boards and electrical equipment .3 fundamentals of automation, automatic control systems and technology .4 instrumentation, alarm and monitoring systems 	<p>Knowledge that ensures:</p> <ul style="list-style-type: none"> .1 operation of equipment and system is in accordance with operating manuals .2 performance levels are in accordance with technical specifications

.5 electrical drives	
.6 electro-hydraulic and electro-pneumatic control systems	
.7 coupling, load sharing and changes in electrical configuration	

Competence (iii): Use hand tools, electrical and electronic measurement equipment for fault finding, maintenance and repair operations

Content of Assessment	Criteria for Satisfactory Assessment
Safety requirements for working on shipboard electrical systems Application of safe working practices <i>Basic knowledge of:</i> .1 construction and operational characteristics of shipboard AC and DC systems and equipment .2 use of measuring instruments, machine tools, and hand and power tools	Implementation of safety procedures is satisfactory Selection and use of test equipment is appropriate and interpretation of results is accurate Selection of procedures for the conduct of repair and maintenance is in accordance with manuals and good practice

Function (2): Maintenance and Repair at the Support Level

Competence (i): Contribute to shipboard maintenance and repair

Content of Assessment	Criteria for Satisfactory Assessment
Ability to use lubrication and cleaning materials and equipment Knowledge of safe disposal of waste materials Ability to understand and execute routine maintenance and repair procedures Understanding manufacturer's safety guidelines and shipboard instructions	Maintenance activities are carried out in accordance with technical, safety and procedural specifications Selection and use of equipment and tools is appropriate

Competence (ii): Contribute to the maintenance and repair of electrical systems and machinery on board

Content of Assessment	Criteria for Satisfactory Assessment
<i>Safety and emergency procedures</i> Basic knowledge of electro-technical drawings and safe isolation of equipment and associated systems required before personnel are permitted to work on such plant or equipment Test, detect faults and maintain and restore electrical	The effect of malfunctions on associated plant and systems is accurately identified, ship's technical drawings are correctly interpreted, measuring and calibrating instruments are correctly used and actions taken are justified

control equipment and machinery to operating condition	Isolation, dismantling and reassembly of plant and equipment is in accordance with manufacturer's safety guidelines and shipboard instructions
Electrical and electronic equipment operating in flammable areas	
Basics of ship's fire-detection system	
Carrying out safe maintenance and repair procedures	
Detection of machinery malfunction, location of faults and action to prevent damage	
Maintenance and repair of lighting fixtures and supply systems	

Function (3): Controlling the Operation of the Ship and Care for Persons On Board at the Support Level

Competence (i): Contribute to the handling of stores

Content of Assessment	Criteria for Satisfactory Assessment
Knowledge of procedures for safe handling, stowage and securing of stores	Stores stowage operations are carried out in accordance with established safety practices and equipment operating instructions The handling of dangerous, hazardous and harmful stores complies with established safety practices Communications within the operator's area of responsibility are consistently successful

Competence (ii): Apply precautions and contribute to the prevention of pollution of the marine environment

Content of Assessment	Criteria for Satisfactory Assessment
Knowledge of the precautions to be taken to prevent pollution of the marine environment Knowledge of use and operation of anti-pollution equipment/agents Knowledge of approved methods for disposal of marine pollutants	Procedures designed to safeguard the marine environment are observed at all times

Competence (iii): Apply occupational health and safety procedures

Content of Assessment	Criteria for Satisfactory Assessment
Working knowledge of safe working practices and personal shipboard safety, including:	Procedures designed to safeguard personnel and the ship are observed at all times

<ul style="list-style-type: none">.1 electrical safety.2 lockout/tag-out.3 mechanical safety.4 permit to work systems.5 working aloft.6 working in enclosed spaces.7 lifting techniques and methods of preventing back injury.8 chemical and biohazard safety	<p>Safe working practices are observed and appropriate safety and protective equipment is correctly used at all times</p>
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