



MARINE DEPARTMENT  
GOVERNMENT OF THE HONG KONG  
SPECIAL ADMINISTRATIVE REGION

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# **River Trade Certificates of Competency and Type Rating Certificates for Deck Officers' Determinations**

**(2024 Edition)**

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Made under Section 8 of the  
Merchant Shipping (Seafarers)(Certification of Officers) Regulation

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MD 714 (Rev. 11/2024)

MERCHANT SHIPPING (SEAFARERS) ORDINANCE  
(CHAPTER 478)

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Type Rating Certificates for  
Deck Officers' Determinations**  
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Made under Section 8 of the  
Merchant Shipping (Seafarers)(Certification of Officers) Regulation

**Marine Department**  
**The Hong Kong Special Administrative Region**

First Edition 2024

[previous: Certificates of Competency and Licences For Deck Officers Determination (2012 Edition)]

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## CHAPTER 1

### COMMENCEMENT, INTERPRETATION AND GENERAL REQUIREMENTS

#### 1.1 Commencement

- 1.1.1 This River Trade Certificates of Competency and Type Rating Certificates for Deck Officers' Determinations (the Determinations) is made by the Seafarers' Authority under powers granted by the Merchant Shipping (Seafarers) (Certification of Officers) Regulation and shall come into operation on 13 November 2024.
- 1.1.2 The Determinations supersedes all previously published Determinations regarding certification of deck officers for coastal-going ships.

#### 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;

**“certificate of proficiency”** means a certificate of proficiency, other than a certificate of competency or a Licence, issued to a seafarer stating that the relevant requirements of training, competencies or seagoing service under the STCW Convention have been met;

**“Chief mate”** means the officer next in rank to the master and upon whom the command of the ship will fall in the event of the incapacity of the master;

**“coastal-going ship”** means any ship employed exclusively in trading, or going, between any place or places situated within river trade limits;

**“Director”** means the Director of Marine;

**“dynamically supported ship or craft (DSC)”** means any vessel as defined in the International Maritime Organization's Assembly Resolution A.373(X) "Code of Safety for Dynamically Supported Craft";

**“examiner”** means a person appointed by the Director to be an Examiner of Masters and Deck Officers;

**“fishing vessel”** means a vessel for the time being employed in sea fishing or a Government fishery research vessel, but does not include a vessel used otherwise than for commercial purposes;

**“high-speed craft (HSC)”** means high-speed craft as defined in the HSC Code;

**“licence”** means a licence issued under Part V of Merchant Shipping (Seafarers) (Certification Of Officers) Regulation;

**“master”** means the person having command of a ship;

**“month”** means a calendar month or 30 days made up of periods of less than one month;

**“propulsion power”** means the total maximum continuous rated output power, in kilowatts, of all the ship’s main propulsion machinery which appears on the ship’s certificate of registry or other official document;

**“pleasure vessel”** means any launch, yacht, inflatable vessel, junk, lorch or other vessel howsoever propelled that—

- (a) is possessed or used exclusively for pleasure purposes; and
- (b) is not let for hire or reward other than under the terms of a charter agreement or hire-purchase agreement, but does not include any launch, yacht, inflatable vessel, junk, lorch or other vessel that has never been launched;

**“rating”** means a member of the ship’s crew other than—

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

**“river trade”** means navigation and the carrying out of marine operations within river trade limits as defined in the Merchant Shipping (Seafarers) Ordinance (Cap.478);

**“river trade certificate of competency”** means a river trade certificate of competency issued by the Director under the section 4(4) and section 6(4) Merchant Shipping (Seafarers) (Certification of Officers) Regulation;

**“river trade service”** means service on board coastal-going ships operating within river trade limits as a seafarer of relevant discipline, relevant to the issue or revalidation of a river trade certificate or other qualification;

**“seagoing”** means beyond the limits of the River trade limits as defined in the Merchant Shipping (Seafarers) Ordinance (Cap.478);

**“seagoing service”** means service on board a seagoing ship relevant to the issue or revalidation of seagoing certificate of competency or other qualification under STCW;

**“sea service”** means the river trade service and seagoing service;

**“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 that applies to Hong Kong;

**“STCW 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 the Convention that applies

to Hong Kong;

**“STCW Regulation”** means a Regulation contained in Attachment 1 to the Final Act of the 2010 Manila Conference of Parties to the STCW Convention;

**“Type Rating Certificate (TRC)”** means a Certificate to man a specific station on a particular type and model of dynamically supported craft or high-speed craft. TRC is to be issued by the Director under section 4(6), section 6(6) of the Merchant Shipping (Seafarers) (Certification of Officers) Regulation.

### **1.3 General Requirements**

- 1.3.1 The subsequent chapters of the Determinations set out the training and qualification requirements for deck officers and the conditions to be satisfied by any person to qualify for a certificate of competency (deck officer) (river trade) as a deck officer, or an extension of the validity of such a certificate, or an endorsement to such a certificate, the manner in which the attainment of such standards or the satisfaction of such conditions is to be established, the procedure for the conduct of examinations, and the subjects and syllabuses for those examinations.
- 1.3.2 An officer manning the station of Master or Deck Officer of any river trade passenger DSC/HSC or any river trade cargo DSC/HSC of 500 gross tonnage and upwards shall, in addition to the appropriate certificate of competency (deck officer) (river trade), be required to hold a valid Type Rating Certificate (TRC) for the type and model of craft in which he/she intends to serve. The conditions to be satisfied by any person to qualify for, or revalidate a TRC, the procedure for the conduct of examinations and the syllabus to be examined are set out in Chapter 8.
- 1.3.3 Any candidate who feels aggrieved by any decision of the examiner may appeal to the Director within thirty (30) days of being informed of such decision.
- 1.3.4 The Director may, at his discretion, permit exemption from all or any of the provisions of the Determinations.

## **CHAPTER 2**

### **GENERAL PROVISIONS**

#### **2.1 Classes of Certificate and Validity**

2.1.1 The classes of river trade certificates of competency are as follows:

Certificate of Competency (Deck Officer) (River Trade) Class 1  
Certificate of Competency (Deck Officer) (River Trade) Class 2  
Certificate of Competency (Deck Officer) (River Trade) Class 3

2.1.2 River trade certificates of competency are only valid for service on coastal-going ships trading within river trade limits.

2.1.3 All river trade certificates of competency are valid for a period of not more than five (5) years and fall due for revalidation on the expiry date shown on the certificate.

2.1.4 In order to revalidate a river trade certificate of competency, the holder must show evidence of meeting the conditions for revalidation which are set out in Chapter 9.

#### **2.2 Proof of Nationality**

2.2.1 All candidates for examination for a certificate of competency will be required to produce proof of name, nationality and date of birth.

#### **2.3 Medical Fitness Certificate**

2.3.1 All candidates for any river trade certificate of competency will be required to produce a valid medical fitness certificate issued under the standard of Merchant Shipping (Seafarers) (Medical Examination) Regulation. A medical fitness certificate is not to be valid for more than two years from the date of issue.

#### **2.4 Date and Place of Examinations**

2.4.1 The dates upon which written examinations are to be held in the following year will be published annually in a Gazette Notice issued by the Director. It is also published in MD website:

<https://www.mardep.gov.hk/en/public-services/exam-for-seafarers/index.html>

2.4.2 Candidates for examination will be informed, at the time of making application, of the place at which the examination will be held.

2.4.3 Candidates who are making application for any examination should follow the procedure set out in paragraph 2.5, ensuring that their application is lodged at least thirty (30) days before the date upon which they wish to be examined. The time and date of the oral examination appointment will then be advised. Application less than thirty (30) days prior the examination day is only accepted case by case upon the

examiner's consideration and seat available.

## **2.5 Application**

- 2.5.1 Intending candidates for either a part, or for the whole, of any river trade certificate of competency examination must complete an application form (MD 692) which may be obtained from the Marine Department, River Trade and Local Examination Section, or by post from:

Marine Department  
River Trade and Local Examination Section  
3/F Harbour Building  
38 Pier Road  
Central  
Hong Kong

The application form could also be downloaded from the Marine Department's website.  
<https://www.mardep.gov.hk/filemanager/en/share/forms/pdf/md692.pdf>

- 2.5.2 Applicants should return the completed application form to the River Trade and Local Examination Section at least thirty (30) days before the intended date of examination, together with the documents as stated in the application form.

- (a) the examination fee;
- (b) passport type photographs (50mm x 40mm);
- (c) sea service testimonials;
- (d) Seafarers' Employment Registration Book or Certificates of Discharge;
- (e) proof of nationality, name and date of birth;
- (f) medical fitness certificate;
- (g) where appropriate
  - (i) existing certificate of competency;
  - (ii) documentary evidence on technical education and practical training;
  - (iii) subsidiary course certificates;
  - (iv) onboard training record book.

Submission of application could be sent via email, post, or Public Form Submission Services in EBS of MD website. The original document should not be sent through post, but should be presented to the examiner prior to the examination if required.

- 2.5.3 Candidates who have made a previous attempt at the same examination, when making application for re-examination, must also submit their copy of the record of results, issued by the examiner following their previous attempt.
- 2.5.4 It is important that the correct procedure for application is followed as Seafarers' Employment Registration Book and sea service testimonials should be submitted for verification which can take time, and in the absence of such verification the candidate cannot be accepted for examination.
- 2.5.5 Candidates who fail in all, or in a part, of an examination, or whose examination result being expired, may attend for the next scheduled examination for the relevant

certificate provided that accommodation is available in the examination hall, even if this means that they are unable to give the full one month notice required by paragraph 2.5.2. In order to take advantage of this facility candidates must submit written application to resit the examination, or part of examination, together with the appropriate fee, immediately upon receiving notification of the examination results.

## **2.6 Enquiries**

- 2.6.1 Candidates may make enquiries about examinations and when doing so, should ensure that the point on which information is sought is clearly stated. Enquiries should be addressed to:

The Examiner of Masters and Mates  
Marine Department  
3/F Harbour Building  
38 Pier Road  
Central  
Hong Kong

Tel. No. : (852) 2852 4362  
Fax No. : (852) 2541 6754  
E-mail : ssrtl@mardep.gov.hk

- 2.6.2 Candidates writing to request a provisional estimate of their river trade service should include a detailed summary of their sea service with the enquiry but should not include original documents.

## **2.7 Particulars of Sea Service**

- 2.7.1 A candidate's eligibility for examination will depend, amongst other factors, on the amount of sea service performed and upon the ranks in which the candidate has served. It is, therefore, imperative that the particulars which candidates enter on the application form are accurately stated.

- 2.7.2 The amount of sea service set down in the Determinations for each class of river trade certificate of competency is the **absolute minimum** that can be accepted. Unless candidates can prove the required amount they will not be issued a river trade certificate of competency after the passing of examinations.

- 2.7.3 Notwithstanding the sea services requirements stipulated in paragraphs 2.16.2, 5.2.1(c), 5.3.1(a) and 5.4.1(a), the applicant can sit for the examination upon completing two third (2/3) required sea service set down in this Determination for each class of river trade certificate of competency. However, in order to attain the certificate of competency (deck officer) (river trade), he ought to have fulfilled sea service requirement.

## **2.8 Testimonials and Watchkeeping Duty Record Certificate**

- 2.8.1 Candidates for river trade certificates of competency must produce testimonials in respect of all sea service performed. These testimonials, which should state the seniority on watch, and the nature of duties performed, are to be signed by the Master

or the Technical/Engineering/Marine Manager. In the case of service as master, the testimonials should be signed by the Technical/Engineering/Marine Manager or some other responsible representative of the employer. A specimen copy of the form of testimonial recommended for this purpose is shown in the Appendix II. The record of Seafarers Employment Registration Book may serve this purpose of testimonials of all sea services.

- 2.8.2 Candidates for river trade certificates of competency (deck officer) for which watchkeeping service is a requirement must also produce Watchkeeping Duty Record Certificate signed by the Master(s) of the vessel(s) in which they have served. A specimen form of the certificate, recommended for the purpose, is shown in Appendix I – Form 1. The Watchkeeping Duty Record Certificate will be returned to candidate the examination is completed.

## **2.9 Use of Information**

- 2.9.1 Information required by the application form will be used by Marine Department for the process of application for examination 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 river trade certificate of competency by any third parties.
- 2.9.2 The supply of information is obligatory. A candidate should ensure that all the information filled in the application form is accurate. Failure to do so may, besides subject to paragraph 2.10, result in an unsuccessful application.
- 2.9.3 For making correction and access to personal data after submission of application form, a candidate may contact the following officer:

Officer-in-charge  
Marine Department  
River Trade and Local Examination Section  
3/F Harbour Building  
38 Pier Road  
Central  
Hong Kong

Tel. No. : (852) 2852 4362  
Fax No. : (852) 2541 6754  
E-mail : ssrtl@mardep.gov.hk

## **2.10 Fraud or Misrepresentation**

- 2.10.1 Candidates are reminded that the Merchant Shipping (Seafarers) (Certification of Officers) Regulation provides that any person who, in connection with an application for the issue of a river trade certificate of competency, or in connection with the endorsement to, or extension of validity of, a river trade certificate of competency:

- (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.

## **2.11 Attempted Bribery**

- 2.11.1 Any candidate 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 a candidate will not be re-examined for such a period as may be decided by the Director.

## **2.12 Unsatisfactory Conduct**

- 2.12.1 Candidates who have neglected to join their vessels after signing crew agreements, or who have left their vessels after joining, other than upon discharge, or who have been under the influence of alcohol/drugs while performing designated duties, or who have committed misconduct on board, will be required to produce satisfactory proof of two years subsequent service at sea with good conduct unless the Director, after investigation, should see fit to reduce this period.

## **2.13 Deafness and other Physical or Mental Handicaps**

- 2.13.1 If, in the course of any examination, the examiner finds that a candidate is afflicted with deafness, an impediment in speech, or with some other physical or mental handicap which he considers sufficient to render the candidate incapable of discharging adequately the ordinary coastal-going ships duties of the holder of a river trade certificate of competency, he will not allow the candidate to complete the examination and the candidate will be refunded of the examination fee.
- 2.13.2 If such a candidate subsequently produces a medical certificate to the effect that the particular handicap has been overcome or has improved or that the candidate's condition is now normal, the Director will reconsider the candidate for examination.

## **2.14 Knowledge of English and Languages for Examinations**

- 2.14.1 All candidates applying examination for river trade certificates of competency must demonstrate to the satisfaction of the examiner that they can master English sufficiently well to perform the duties required of them on board a coastal-going ships operating in river trade limits.
- 2.14.2 The oral/practical examinations for certificates of competency (deck officer) (river trade) class 1 will always be conducted in English, but candidates for the oral/practical examination for a certificates of competency (deck officer) (river trade) class 2 and class 3 may elect to have their oral/practical examination partly conducted in English and Chinese. Such candidates must indicate their preference at the time of making application.
- 2.14.3 Written examinations for river trade certificates of competency (deck officer) may be conducted in either Chinese or English.
- 2.14.4 Candidates for written examinations which are conducted in English will be expected to demonstrate a reasonable standard of grammar, spelling, and composition in their

answers.

- 2.14.5 Candidates for written examinations which are conducted in Chinese will be expected to demonstrate a reasonable standard of grammar, fluency, accuracy and the comprehensive ability in the use of Chinese language.

## **2.15 Issue of Certificates**

- 2.15.1 Candidates who are successful in all parts of an examination, and who meet all the requirements for the issue of a certificate of competency (deck officer) (river trade) of the class applied for, will be issued with a certificate of competency (deck officer) (river trade). The river trade certificate of competency will issue in electronic format PDF document (e-Certificate). When the E-certificate is ready, candidates will be notified by email, or mobile phone short message to the candidates' email address or MOBILE phone as given on the application form. The candidates can download the E- certificate from the portal of MD website: <https://www.mardep.gov.hk/download/index.html>.
- 2.15.2 A candidate who has passed all parts of the examination but who has not yet obtained the subsidiary qualifications necessary to become eligible for the issue of a certificate will be issued with a record of results form. Upon production of this form and proof that the requisite subsidiary qualifications have been obtained within 5 years from the date of passing all examination, the candidate will be issued with a certificate of competency (deck officer) (river trade) in the normal manner. The period from the date of last examination shall not exceed 5 years. If it exceeds 5 years and less than 10 years, additional approved oral examination may be necessary prior to the issue of certificate of competency (deck officer) (river trade). If it exceeds 10 years, full examination shall be required.
- 2.15.3 All other candidates for the examination will receive a record of results which should be retained and produced at any subsequent examinations.
- 2.15.4 To avoid unnecessary delays in the issue of certificates, it is important that candidates should inform the examiner promptly of any change of information (e.g. email and mobile phone number) given on the application form.

## **2.16 Insufficient Service**

- 2.16.1 If, after a candidate has passed the examination, it is discovered that his sea service is insufficient to entitle him to receive a certificate of competency (deck officer) (river trade) of the class for which he has been examined, he will not be issued with such a certificate of competency (deck officer) (river trade). If, however, the Director is satisfied that the error in the calculation of sea service did not occur through any fault or misrepresentation on the part of the candidate, the appropriate certificate will be granted when he has made up the deficiency in sea service.
- 2.16.2 In case of a candidate has passed the examination under the arrangement in paragraph 2.7.3 (i.e. permission to sit the examination after obtained two third (2/3) sea service), the examination result will be recorded in MD, the certificate of competency (deck officer) (river trade) will be issued upon the sufficient sea service being obtained.

## **2.17 Fees**

- 2.17.1 Applicants for examination will be required to pay the examination fee before any steps are taken to verify their eligibility for examination. Candidates who are found to be ineligible will have their fees returned.
- 2.17.2 The fee paid for examination for a certificate of competency (deck officer) (river trade) is not refundable in the event of failure to pass any part of the examination.
- 2.17.3 A candidate who fails to appear for any part of any examination at the appointed time may be regarded as having failed by default in that part of the examination and the examination fee will be forfeited unless the candidate produces reasonable proof that failure to attend was unavoidable.
- 2.17.4 Details of the current scale of fees may be obtained from the River Trade and Local Examination Section, or the Schedule of the Merchant Shipping (Seafarers) (Fees) Regulation, Cap. 478AB.
- 2.17.5 A candidate who, due to circumstances beyond his control, has to postpone an examination for which he has already made application, may do so for a maximum period of one year beyond the date of the examination applied for. A candidate wishing to postpone examination should apply in writing not less than three (3) working days in advance of the examination. When he subsequently applies to sit the postponed examination, he will be required to pay any increase in fee which may have come into effect since his original application.
- 2.17.6 If the candidate wishes to be examined at a date one year after the date of the previously arranged examination, his paid examination fee will be forfeited and he will be required to resubmit his application with fee as if it is a new application.

## **2.18 Issue of Replacement Certificate**

- 2.18.1 If a certificate of competency is lost, the holder may apply to the River Trade and Local Examination Section for a replacement certificate (with new Unique Tracking Number). A fee will be charged for the replacement certificate unless the holder can show that the loss was as a result of shipwreck or ship fire. An applicant for a replacement certificate will be required to make a declaration to the examiner regarding the circumstances in which the certificate was lost.

## **2.19 Holder of seagoing certificate of competency serving on coastal-going ships**

- 2.19.1 Candidates shall apply for and obtain river trade class endorsement prior to serving on coastal-going ships operating within the river trade limits. A company letter proving the candidate is employed by a river trade vessel operator shall be produced as an evidence for the application.

## **CHAPTER 3**

### **SEA SERVICE**

#### **3.1 General**

- 3.1.1 This chapter specifies provisions relating to approved sea service.
- 3.1.2 Except where otherwise specified, the approved sea service required for river trade certificate of competency is the service performed in ships which proceed to sea within river trade limits area and or seagoing area and which are actively engaged in commercial trading. The Director may, at his discretion, accept a proportion of non-trading service in lieu of some service in trading vessels but, in general, non-trading service not specifically provided for in the Determinations will not be accepted.
- 3.1.3 Approved sea service means time spent on board vessel 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. Where watchkeeping service is also a requirement, candidates must produce Watchkeeping Duty Record Certificate for HSC Officer, Cadet and Rating, etc. (Appendix I – Form 1) in addition to proof of sea service.
- 3.1.4 Proof of sea service for candidates serving on Hong Kong registered ships can be verified by the record of seafarer's employment registration book (SERB) and or certificate of discharge, or record of other equivalent document recording employment on board a ship, and or verified by Mercantile Marine Office of Marine Department if in need. Sea service on other ships must be confirmed by the record of SERB, discharge certificate, or the equivalent document recorded 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 a candidate 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 thirty (30) to give months, and residual days. The months should then be added as the total months.
- 3.1.6 Candidates for river trade certificates of competency having sea service on vessels which have not opened articles of agreement will have the total time employed on the vessels accepted as approved sea service. Such service must, however, be attested to by the representative of the owners of the vessel, or another organization or person assumed the responsibility for the operation of the vessel from the owner.
- 3.1.7 Approved sea service for certificates of competency (deck officer) (river trade) must be performed in the deck department of commercial coastal-going ships operating within river trade limits of not less than 50 gross tonnage (GT).
- 3.1.8 Notwithstanding any provisions in Chapter 5 relating to approved sea service for

certificates of competency (deck officer) (river trade), any candidate who has qualified for entry to the examinations for any class of seagoing certificate of competency specified in the relevant seagoing determinations shall also be deemed to have met the requirements for examination for the corresponding class of certificate of competency (deck officer) (river trade). For no trading service and local service in Hong Kong, same consideration in the seagoing determinations shall be taken.

## **3.2 Remission of Sea Service**

3.2.1 Candidates for river trade certificate of competency only may have the required periods of sea service reduced by remissions granted in respect of attendance at approved courses of training and in respect of service in certain ranks as detailed in the following paragraphs.

3.2.2 Remission may be granted under more than one heading but in no case will the total period of remission exceed the maximum allowances stated below:

Class 3	maximum remission 24 months
Class 2	no remission
Class 1	maximum remission 12 months

3.2.3 Candidates for a certificate of competency (deck officer) (river trade) Class 3 who have satisfactorily completed the recognized Higher Diploma Courses in Maritime Studies at the Vocational Training Council and have passed the final examination may be granted with 24 months of remissions from the sea service requirement.

3.2.4 Candidates for a certificate of competency (deck officer) (river trade) Class 3 who hold a Bachelor Degree in International Shipping and Transport Logistics granted by the Hong Kong Polytechnic University will be granted 18 months remission from the sea service requirement. If appropriate supplementary electives are completed successfully during the course of his/her study, further remission may be granted subject to the limit set out in paragraph 5.2.2.

3.2.5 Candidates for Class 1 certificates of competency may be granted remission of sea service equivalent to 100% of any time served in the rank of Chief Mate on seagoing or coastal-going ships while holding a Class 2 certificate, up to a maximum of 12 months actual service in that rank.

3.2.6 Subject to paragraph 3.2.2, when any candidate has attended and been successful in course end examination of any subjects in the Upgrading Course for Certificates of Competency (CoC) Class 3 (Deck), the further sea service remissions would also be granted, i.e. one month for one MSTI Class 3 (Deck) Upgrading Course subject.

## **CHAPTER 4**

### **PARTICULARS OF ADDITIONAL AND SUBSIDIARY QUALIFICATIONS**

#### **4.1 Basic Training**

4.1.1 In accordance with Section A-VI/1 of the STCW Code, the following approved basic training or instruction needs to be provided to seafarers before they are assigned to any shipboard duties:

- (a) personal survival techniques;
- (b) fire prevention and firefighting;
- (c) elementary first Aid; and
- (d) personal safety and social responsibilities.

4.1.2 Seafarers qualified in accordance with paragraph 4.1.1 are required, every five years, to provide evidence of having maintained the required standard of competence, or holding a valid Certificate of Proficiency in Basic Training.

#### **4.2 Training in Survival Craft, Rescue Boats and Fast Rescue Boats**

4.2.1 In accordance with Section A-VI/2 of the STCW Code, there are two kinds of trainings under this category. They are:

- (a) Proficiency in Survival Craft and Rescue Boats other than Fast Rescue Boats; and
- (b) Proficiency in Fast Rescue Boats.

4.2.2 Seafarers qualified in accordance with paragraph 4.2.1 are required, every five years, to provide evidence of having maintained the required standard of competence, or holding a valid Certificate of Proficiency in Survival Craft and Rescue Boats other than Fast Rescue Boats and/or a valid Certificate of Proficiency in Fast Rescue Boats.

#### **4.3 Training in Advanced Fire-fighting**

4.3.1 In accordance with Section A-VI/3 of the STCW Code, seafarers designated to control fire-fighting operations shall have successfully completed advanced training in techniques for fighting fire.

4.3.2 Seafarers qualified in accordance with paragraph 4.3.1 are required, every five years, to provide evidence of having maintained the required standard of competence, or holding a valid Certificate of Proficiency in Advanced Fire-fighting.

4.3.3 The above 5-yearly refresher course requirements in paragraph 4.1.2, 4.2.2 and 4.3.2 for evidence of having maintained the required standard of competence as same as seagoing seafarers be waived for the river trade seafarers, provided that the following conditions are met with:

- For any river trade rating: has HSC shipboard service record for at least an accumulative period of 12 months during every 5-year period counting from the

issuance date of the rating's most recent valid safety training record;

- For any officer holding river trade certificate of competency: holds a valid TRC (Master, C/O, NVO, or Engineer).

River trade seafarers who fail to provide evidence of meeting above conditions, need to complete a refresher course, or hold valid Certificates of Proficiency described in above. The completion of refresher course at the time over 5 years after his initial training is acceptable.

#### **4.4 Training in Medical First Aid**

- 4.4.1 Seafarers who are designated to provide medical first aid on board ship shall have completed an approved medical first aid or first aid at sea course or equivalent in accordance with Section A-VI/4, or hold a Certificate of Proficiency in Medical First Aid or the equivalent.
- 4.4.2 Certificate of Proficiency in Medical First Aid or the equivalent is not subject to a limiting period of validity.

#### **4.5 Training in Medical Care**

- 4.5.1 Seafarers who are designated to take charge of medical care on board ship shall have completed an approved medical care course or equivalent in accordance with Section A-VI/4, or hold a Certificate of Proficiency in Medical Care or the equivalent.
- 4.5.2 A Certificate of Proficiency in Medical Care or the equivalent is not subject to a limiting period of validity.
- 4.5.3 Possession of a Certificate of Proficiency in Medical First Aid and attendance at an approved Proficiency in Medical Care training course are essential requirements for the issue of a Certificate of Proficiency in Medical Care.

#### **4.6 Efficient Deck Hand Certificate (EDH)**

- 4.6.1 There is no limiting period of validity for this certificate.
- 4.6.2 Candidates for river trade certificate of competency have to attend an approved EDH training course or have to produce a letter testifying to their success in the EDH examination in lieu of an EDH certificate.

#### **4.7 Global Maritime Distress and Safety System (GMDSS) - Restricted Operator Certificate (ROC) or General Operator Certificate (GOC)**

- 4.7.1 This certificate is issued by the Director-General of Communications of Hong Kong and has a period of validity of five years.
- 4.7.2 Candidates for any class certificate of competency (deck officer) (river trade), must have completed approved education and training and meet the standards of competence specified in section A-IV/2 of the STCW Code by holding a valid GMDSS GOC or ROC.

#### **4.8 Radar Navigation Certificate - Operational Level**

- 4.8.1 This certificate has no limitation period of validity.
- 4.8.2 Candidates for a certificate of competency (deck officer) (river trade) Class 3, who are unable to attend a course for the Radar Navigation Certificate - Operational Level or to meet the qualifying requirements for admission to the course, may substitute a certificate of attendance at an approved Radar Operator course.
- 4.8.3 The elements of an approved Radar Navigation Certificate - Operational Level shall include radar navigation, radar plotting and use of ARPA. Details of syllabus and course arrangement shall be subject to the approval of the Director.

#### **4.9 Radar Navigation Certificate - Management Level**

- 4.9.1 This certificate has no limiting period of validity.
- 4.9.2 A Radar Simulator course attendance certificate issued before 1st October 1984 will be accepted in lieu of a Radar Navigation Certificate - Management Level.
- 4.9.3 Candidates for a certificate of competency (deck officer) (river trade) class 2, who are unable to obtain the Radar Navigation Certificate - Management Level or to meet the qualifying conditions for the issue of such a certificate, may substitute a certificate of attendance at an approved Radar Simulator course such as HSC Radar Simulator course.
- 4.9.4 The elements of an approved Radar Navigation Certificate - Management Level shall include management level training in the use of radar and ARPA, including bridge teamwork and search and rescue. Details of syllabus and course arrangement shall be subject to the approval of the Director.

#### **4.10 Operational Use of Electronic Chart Display and Information Systems (ECDIS) Certificate**

- 4.10.1 There is no limiting period of validity for this certificate.
- 4.10.2 This certificate is not required for those who serve exclusively on ships not fitted with ECDIS. In this case, these limitations shall be reflected in the certificates issued to the seafarer concerned.
- 4.10.3 The elements of an approved Operational Use of ECDIS certificate shall include knowledge of the capability and limitations of ECDIS operations, and proficiency in operation, interpretation, and analysis of information obtained from ECDIS. Details of syllabus and course arrangement shall be subject to the approval of the Director.

#### **4.11 Short Course Certificates obtained outside Hong Kong**

- 4.11.1 Certificates of proficiency and or certificate of training (i.e. approved training course by STCW party member) to those listed in this chapter issued by Administration or authorized training institute of any other country which at the time of issue was a signatory to the STCW Convention may be accepted as equivalent meeting the requirements of the Determinations. In all cases, evidences and verifications are required where appropriate to certify that training in the particular subjects has been performed in accordance with the requirements.

## **CHAPTER 5**

### **QUALIFYING REQUIREMENTS**

#### **5.1 General**

5.1.1 To qualify for the issue of an initial certificate of competency (deck officer) (river trade) of any class in Hong Kong, a candidate must:

- (a) have completed and passed the assessment of an approved proficiency in basic training course in accordance with Section A-VI/1 of the STCW Code on:
  - (i) personal survival techniques;
  - (ii) fire prevention and firefighting;
  - (iii) elementary first Aid;
  - (iv) personal safety and social responsibilities;or hold a valid Certificate of Proficiency in Basic Training.
- (b) have completed and passed the assessment of an approved proficiency in survival craft and rescue boats course or equivalent in accordance with Section A-VI/2 of the STCW Code, or hold a valid Certificate of Proficiency in survival craft and rescue boats course;
- (c) have completed and passed the assessment of an approved proficiency in advanced fire-fighting course or equivalent in accordance with Section A-VI/3 of the STCW Code, or hold a valid Certificate of Proficiency in Advanced Fire-fighting;
- (d) have completed and passed the assessment of an approved proficiency in medical first aid course or equivalent in accordance with Section A-VI/4 of the STCW Code, or hold a Certificate of Proficiency in Medical First Aid; and
- (e) have a valid medical fitness certificate.

Refer to paragraph 4.5.3, at the time of the issue of certificate, the candidate shall keep the training of items (a), (b) and (c) valid either by the sufficient sea service in the past five years or completion of a refresher course.

#### **5.2 Certificate of Competency (Deck Officer) (River Trade) Class 3**

5.2.1 To qualify for the issue of a certificate of competency (deck officer) (river trade) class 3, a candidate must:

- (a) be not less than 18 years of age;
- (b) have completed an education to the standard of Secondary 3 or equivalent level;
- (c) have served not less than 36 months of approved sea service;  
or hold a Coxswain Grade 1 certificate issued by the Marine Department.
- (d) have spent not less than 500 hours of bridge watchkeeping duties (including lookout) under the supervision of a certificated officer in the final 12 months of

approved Sea Service. The watchkeeping duties must be recorded clearly in hours and certified by the supervising officer and the master on a Watchkeeping Duty Record Certificate. A sample of the certificate can be found at Appendix I - Form 1;

- (e) pass the examination specified in Chapter 7 unless holding valid exemptions from that examination or from parts of it;
  - (f) in addition to those stated in paragraph 5.1, hold the following subsidiary and additional certificates or acceptable alternatives as specified in Chapter 4:
    - (i) Efficient Deck Hand Certificate or appropriate experience
    - (ii) GMDSS (ROC or GOC)
    - (iii) Proficiency in Communications
    - (iv) Approved Radar Operator Course or Radar Navigation - Operational Level
    - (v) Operational Use of ECDIS.
- 5.2.2 A maximum period of remission of sea service of 24 months in respect of approved training course/programme may be granted from the sea service requirement stated in paragraph 5.2.1 (c). Such approved training programme shall include an on-board training period to be documented in an approved training record book. The on-board training period will also be reckoned as requisite approved sea service mentioned in paragraph 5.2.1(c). Details of other courses which are approved for remission and the remission available from each are contained in Chapter 3.
- 5.2.3 Sea service as a General Purpose rating will count at two thirds of the full rate until the first year of approved service is completed (i.e. for a maximum of 18 months actual service in that capacity), thereafter such service will count in full.
- 5.2.4 When any candidate has attended and been successful in course end examination of any subjects in the Upgrading Course for Certificates of Competency (CoC) Class 3 (Deck), the further sea service remissions would also be granted, i.e. one month for one module (i.e. upgrading course subject) of Upgrading Course for Certificates of Competency (CoC) Class 3 (Deck).

### **5.3 Certificate of Competency (Deck Officer) (River Trade) Class 2**

- 5.3.1 To qualify for the issue of a certificate of competency (deck officer) (river trade) class 2, a candidate must:
- (a) have served not less than 12 months of approved sea service as a watchkeeping officer on coastal-going ships operating within the river trade limits while holding a certificate of competency (deck officer) class 3 or a certificate of competency (deck officer) (river trade) class 3, or a certificate specified as equivalent to either of these certificates;
  - (b) pass the examination specified in Chapter 7; and
  - (c) in addition to those stated in paragraph 5.1, hold the following subsidiary and additional certificates or their acceptable alternatives as specified in Chapter 4:
    - (i) GMDSS (ROC or GOC)
    - (ii) Radar Navigation - Management Level or approved Radar Simulator course  
or HSC Radar Simulator course
    - (iii) Operational Use of ECDIS.

## **5.4 Certificate of Competency (Deck Officer) (River Trade) Class 1**

5.4.1 To qualify for the issue of a certificate of competency (deck officer) (river trade) class 1, a candidate must:

- (a) have served for not less than 36 months of approved sea service on vessels sailing in the river trade limits as a watchkeeping officer while holding a certificate of competency (deck officer) class 3 or a certificate of competency (deck officer) (river trade) class 3, or a certificate specified as equivalent to either of these certificates;
- (b) pass the examination specified in Chapter 7; and
- (c) in addition to those stated in paragraph 5.1, hold the following subsidiary and additional certificates or their acceptable alternatives as specified in Chapter 4:
  - (i) GMDSS (ROC or GOC)
  - (ii) Certificate of Proficiency in Medical Care or the equivalent
  - (iii) Radar Navigation – Management Level or Approved Radar Simulator course  
or HSC Radar Simulator course
  - (iv) Operational Use of ECDIS.

5.4.2 At least 6 months of the approved period of sea service specified in paragraph 5.4.1 must have been spent either as officer in sole charge of a watch, or as the second of two or more officers keeping a watch at the same time.

## **5.5 River Trade Eligibility - General**

5.5.1 Notwithstanding any other requirement of this Chapter, any candidate who has qualified for entry into the examinations for any class of seagoing certificate of competency will also be deemed to have met the requirements for examination for the corresponding class of River Trade certificate of competency.

5.5.2 Sea service gained as an NVO will be counted at one third of the full rate up to a maximum amount of 9 months towards the sea service specified in paragraphs 5.3.1(a) & 5.4.1(a). However, such sea service may be counted at two-third of the full rates up to a maximum amount of 12 months provided that 500 hours of bridge watch-keeping duties (including lookout) are carried out under the supervision of a certificated officer. Each hour of such watch-keeping duties must be recorded clearly and certified by the master of the vessel. A sample certificate can be found at Appendix I - Form 1. If less than 500 hours of bridge watch-keeping duties are carried out, the eligible sea service will be calculated in pro rata. Such bridge watch-keeping hours shall be obtained while holding a seagoing Class 3 certificate of competency or a River Trade Class 3 certificate of competency, or a certificate specified as equivalent to either of these certificates.

## **CHAPTER 6**

### **EXAMINATION PROCEDURES**

#### **6.1 General**

- 6.1.1 Examinations will begin at a time appointed by the examiner.
- 6.1.2 No person will be allowed to enter the examination room other than candidates and those whose duties require them to be present.
- 6.1.3 Total silence must be maintained in the examination room.
- 6.1.4 The following publications and tables are specified by the Director and copies of them are available for the use of candidates in the examination room:
- Norries Nautical Tables (full edition)  
Burtons Nautical Tables  
Admiralty Tide Tables Volumes 1, 2, 3, and 4  
Nautical Almanac (NP 314)
- 6.1.5 Candidates who wish to use their own copies of the above tables, or who wish to use tables other than those above, may bring such tables into the examination room on condition that they submit them to the examiner for scrutiny and approval before the examination begins.
- 6.1.6 Subject to the examiner's approval, no restriction will be placed on the use of any tables. However, candidates should understand the theory on which such tables are based on and the tables used should be capable of giving an answer within the required limits of accuracy as stated in paragraph 6.3. When tables other than those specified by the Director are used in answering a question, the name of the tables should be stated on the candidate's answer paper.
- 6.1.7 Candidates may use their own drawing instruments and non-programmed calculators provided that the examiner's approval is obtained before the examination begins. Candidates are required to produce fully worked out calculations. Answers where the process of calculation is not shown may be subject to a deduction of marks.
- 6.1.8 Other than Nautical Tables which have been approved by the examiner, no books or papers of any kind whatsoever may be brought into the examination room. Any candidate infringing this rule will be regarded as having failed the examination and will not be accepted for re-examination for a period of 6 months.
- 6.1.9 Candidates who deface, or otherwise injure or damage, any property of the Marine Department will have their service papers, (certificates, testimonials etc.) retained until such time as they have replaced the damaged items.
- 6.1.10 No candidate is permitted to leave the examination room without permission and without giving up the paper on which he is engaged. A candidate who does so will be regarded as having failed in that paper.
- 6.1.11 All work must be shown and any rough work which is done on scrap paper supplied

for the purpose must be handed in at the end of the examination.

6.1.12 During the course of an examination, any candidate who is found to be:

- referring to an unauthorised book or paper;
- copying from another candidate;
- affording assistance or information to another candidate;
- accepting assistance or information from another candidate;
- communicating in any way with another candidate/person;
- copying any part of the questions or answers for the purpose of taking them from the examination room;
- guilty of insolence to the examiner; or
- guilty of disorderly or improper conduct in the examination room,

will be regarded as having failed the examination as a whole and will not be accepted for re-examination for such period as may be decided by the Director.

## **6.2 Written Examinations**

6.2.1 Candidates will be provided with as many sheets of ruled paper as are necessary for them to complete the written work, all of which, except for sketches, must be completed in ink. Each answer should be started by writing in the margin the number of the question to which it relates. Candidates should, in their own interests, write in a clear and legible hand.

6.2.2 Unless a question specifies the required method of solution, candidates will be allowed to solve problems by any method, provided that the method used is correct in principle, affords the required degree of precision, and is clearly shown on the answer paper.

6.2.3 Answer scripts from written examinations, including charts used should be retained for a period of not less than 60 days following an examination in case a candidate wishes to appeal to the Director against the decision of examiner.

## **6.3 Degree of Precision Required**

6.3.1 Candidates should work to a degree of precision consistent with the data supplied in the question and the problem concerned. Information from tables should be extracted as accurately as possible consistent with the inherent accuracy of the tables, and final answers should be given to the best degree of precision which is justified, and no more.

6.3.2 When making calculations to obtain a ship's position, candidates are expected to work to 0.2 of a minute of arc, and to the nearest second of time.

6.3.3 Any method of calculation which is used to obtain a position line should be capable of providing an answer correct to within one nautical mile.

6.3.4 Answers to calculations of compass errors, bearings and courses, should be worked to within 0.5 degrees of arc.

6.3.5 Tidal calculations should be worked to provide an answer which is within 15 cm of a precise result.

## **6.4 Validity of Partial Passes**

- 6.4.1 Except as provided elsewhere in this section, a pass in any subject of the examinations for a certificate of competency will remain valid for 5 years from the date of examination subject to the discretion of the examiner in an individual case.

## **6.5 Resits**

- 6.5.1 A candidate who fails only in one paper of a part of the written examination may, at the discretion of the examiner, be permitted to resit that paper. A failure at the resit will mean that the candidate is deemed to have failed that paper of the examination. A pass in the resit will mean that the candidate is deemed to have passed that paper of the examination.

## **6.6 Oral and Practical Examinations**

- 6.6.1 The oral/practical part of each examination is intended to ascertain the candidate's competency in the practical aspects of an officer's duties.
- 6.6.2 During the course of the examination, the examiner will test candidates', among other things, knowledge of the sense and the intention of the International Regulations for Preventing Collisions at Sea. A mere ability to recite the regulations word for word will not suffice to ensure a candidate's passing, nor will a lack of such ability necessarily result in failure, provided that the candidate is able to satisfy the examiner that he grasps the full significance, content, and practical application of the regulations. Examiners will not ask for the content of the regulations by number, but by the subject with which they deal. The use of verses as aids to memorizing the regulations will be discouraged.
- 6.6.3 Examiners will not place candidates in the position of handling a sailing vessel, but will test the candidate's ability to recognize the lights and signals of a sailing vessel and the candidate's understanding of a sailing vessel's possible manoeuvres according to the direction of the wind.
- 6.6.4 A candidate who fails in an oral/practical examination through serious weakness in practical knowledge may, at the examiner's discretion be given a time penalty which may include a requirement to perform further sea service before being re-examined. Such sea service will not exceed 6 months and may be performed in any deck capacity in any coastal-going ships operating within river trade limits or seagoing ship.

## **6.7 Exemptions**

- 6.7.1 Candidates who have successfully completed the approved Higher Diploma in Maritime Studies Course (HDMS) at the Vocational Training Council and obtained 70 marks on both the written paper and the practical test respectively in the corresponding subject of Occupational Training, will be exempted from the examination of the written paper and the practical test of "Proficiency in Communication" in the Certificate of Competency Class 3 (Deck Officer) examination.
- 6.7.2 MSTI graduates who have successfully completed HDMS and obtained 50 marks or above in average on the written papers in the subjects "General Ship Knowledge A", "General Ship Knowledge B", "Cargo Work A", "Cargo Work B", "Ship Stability A"

- and “Ship Construction and Maintenance”, provided that each subject must be obtained more than 40 marks, will be exempted from the examination of the written paper of “General Nautical Knowledge” in the Class 3 (Deck Officer) (River Trade) Certificate of Competency examination.
- 6.7.3 MSTI graduates who have successfully completed HDMS and obtained 70 marks or above in average on the written papers in the subjects “Chartwork and Coastal Navigation” and “Passage Planning A”, provided that each subject must be obtained more than 60 marks, will be exempted from the examination of the written paper of “ChartWork” in the Class 3 (Deck Officer)(River Trade) Certificate of Competency examination.
- 6.7.4 Upgrading Course for Certificates of Competency (CoC) Class 3 (Deck) is being held by Maritime Services Training Institute in respect of the subjects “Coastal Navigation (CN)”, “General Ship Knowledge (GSK)” and “Proficiency in Communications (Signals)”.
- 6.7.5 When any candidate has attended and passed any subjects in the Upgrading Course, the corresponding subjects would be exempted from the written examination (i.e. General Nautical Knowledge, Chartwork, Proficiency in Communication in written and practical test) for Certificate of Competency (Deck officer) examination conducted by Marine Department.
- 6.7.6 There is five (5) years limiting period of validity of exemption for Class 3 upgrading courses.

## **CHAPTER 7**

### **EXAMINATION STRUCTURE AND MARKING**

#### **7.1 Certificate of Competency (Deck Officer) (River Trade) Class 3**

7.1.1 The examination for this certificate is in two parts as follows.

##### **Part A**

General Nautical Knowledge;	2-hour written paper,	Pass mark 50%
Chartwork;	2-hour written paper,	Pass mark 70%

##### **Part B**

Meteorology;	Oral examination
Seamanship & Safety;	Oral and Practical examination

These two examinations in Part B will normally be taken concurrently. The results of each will be recorded separately and candidates will be required to achieve a pass in both subjects.

Note : Proficiency in	1-hour written paper	Pass mark 70%
Communication;	Oral/Practical	Pass mark 70%

#### **7.2 Certificate of Competency (Deck Officer) (River Trade) Class 2**

7.2.1 The examination for this certificate is in two parts as follows. The two parts may be taken together or separately.

##### **Part A**

Business & Law;	2-hour written paper;	Pass mark 50%
Shipboard Operations;	1½ -hour written paper;	Pass mark 50%
Ship Construction, Stability & Engineering Knowledge;	3-hour written paper;	Pass mark 60%
Navigation Aids & Instruments;	2-hour written paper;	Pass mark 60%

##### **Part B**

Seamanship & Safety;	Oral and practical examination.
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#### **7.3 Certificate of Competency (Deck Officer) (River Trade) Class 1**

7.3.1 For candidates who have passed Part A of the Class 2 examination at the Marine

Department, the examination for a Certificate of Competency (Deck officer) (River trade) Class 1 will be solely an oral/practical examination. Candidates who do not hold a Class 2 Certificate of Competency issued by the Marine Department under the Determination or whose Class 2 certificate of Competency was issued under previous Determinations or Rules, will be required to pass Part A of the Class 2 examination in addition to the Class 1 oral/practical examination.

## **CHAPTER 8**

### **EXAMINATION SYLLABUSES**

#### **8.1 Introduction**

- 8.1.1 The examinations set under these syllabuses will use the SI system of units, or where this is impractical, the appropriate and accepted nautical units.
- 8.1.2 The syllabuses are intended to be progressive from class to class and the syllabus for a higher class in any examination is always presumed to include the syllabus for the corresponding subject, if any, in the preceding class of certificate of competency. Examination questions may be set which combine more than one paragraph in the syllabus.
- 8.1.3 A candidate may be asked questions arising out of the written work in the oral and practical examination if the examiner deems it necessary on account of any weakness shown by the candidate.

#### **8.2 Proficiency in Communications (1-hour)**

*Function : Navigation at the operational level*

*Competence (i) : Use the IMO Standard Marine Communication Phrases and use English in written and oral form.*

*Criteria : English language navigational publications and messages relevant to the safety of the ship are correctly interpreted or drafted. Communications are clear and understood.*

#### ***English Language***

- (a) Adequate knowledge of English language to enable the officer to use charts and other nautical publications, to understand meteorological information and messages concerning ship's safety and operation, to communicate with other ships, coast stations and VTS centres and to perform the officer's duties also with a multilingual crew.
- (b) The ability to use and understand the IMO Standard Marine Communication Phrases (IMO SMCP) to cover shipboard terms and operations to do with mooring and anchoring, deck work and cargo work; bridge watchkeeping, instructions from pilots, and instructions to ratings; emergency situations, safety of life at sea, and fire-fighting.
- (c) Radio telephony, simple operation of VHF and Receiver/Transmitter sets.
- (d) Procedures in handling messages related to entering and leaving port and structured according to the IMO Standard Marine Communication Phrases.
- (e) Procedures for the handling of distress traffic, urgency, safety messages and navigational messages.

*Competence (ii) : Transmit and receive information by visual signalling*

*Criteria : Communications within the operator's area of responsibility are consistently successful.*

### ***Visual Signalling***

- (f) The ability to transmit and receive, by Morse light, distress signal SOS as specified in Annex IV of the International Regulations for Preventing Collisions at Sea, 1972, as amended and appendix 1 of the International Code of Signals.
- (g) The ability to transmit and receive, by Morse light, visual signalling of single-letter signals as specified in the International Code of Signals.
- (h) The ability to recognize flags of the International Code of Signals and to know their single letter meanings.
- (i) The ability to use the International Code of Signals.

## **8.3 Certificate of Competency (Deck Officer) (River Trade) Class 3**

### **Part A**

#### ***Paper 1 - General Nautical Knowledge (2-hour)***

*Function : Controlling the operation of the ship and care for persons on board at the operational level*

*Competence : Maintain seaworthiness of the ship*

*Criteria : The stability conditions comply with the IMO intact stability criteria under all conditions of loading. Actions to ensure and maintain the watertight integrity of the ship are in accordance with accepted practice.*

### ***Ship Construction***

- (a) General knowledge of the principal structural members of a ship and the proper names for the various parts.
- (b) General ideas of ship construction and plans available aboard ship.
- (c) General definitions of main dimensions.
- (d) General ideas on welding and oxy-acetylene cutting and the precautions to be taken when such processes are carried out on board.

### ***Ship Stability***

- (e) Working knowledge and application of stability, trim and stress tables, diagrams and stress calculating equipment.

- (f) Understanding of the fundamentals of watertight integrity.
- (g) The meaning of the terms:
  - i. Displacement
  - ii. Deadweight
  - iii. Buoyancy and reserve buoyancy and an understanding of the fundamental actions to be taken in the event of partial loss of intact buoyancy
  - iv. Trim
- (h) General understanding with definitions of:
  - i. Centre of Gravity; unstable, stable, and neutral equilibrium
  - ii. Centre of buoyancy
  - iii. Metacentric height
  - iv. Righting lever
  - v. Righting moment
- (i) The use of stability and hydrostatic data supplied to vessels and the practical application of such data.
- (j) The effects of adding and removing weights; the danger of slack tanks.
- (k) Load line marks. The effect of density on draught and freeboard. Fresh Water Allowance.

**Paper 2 - Chartwork (2-hour)**

*Function : Navigation at the operational level*

*Competence : Plan and conduct a passage and determine position*

*Criteria : The primary method of fixing the ship's position is the most appropriate to the prevailing circumstances and conditions. The position is determined within the limits of acceptable instrument/system errors.*

**Terrestrial and Coastal Navigation**

- (a) Ability to fix position by simultaneous cross bearings or bearing and range of landmarks, aids to navigation including lighthouses, beacons and buoys; dead reckoning taking into account winds, tides, currents and estimated speed.
- (b) A thorough knowledge of nautical charts, tide tables, light lists and sailing directions and their correction using Notices to Mariners and navigational warnings by radio and Navtex and ship's routing information.
- (c) Given variation and deviation of the magnetic compass or gyro error, to convert true courses into compass courses and vice versa. Given a sample table of deviations to extract the deviation thence to convert true course into magnetic and compass course.

To find the compass course between two positions.

Allowance for leeway.

Given compass course steered, the speed of the ship and the direction and rate of the current or tidal stream to find the true course, speed made good and DR position.

Given course steered and distance run, to determine the set and rate of current experienced between two positions.

- (d) The use of clearing marks and transit bearings. Methods of determining compass error by transit bearings.
- (e) Distance of sighting lights.
- (f) To find the time and height of high and low water for places in river trade limits for which data is available.
- (g) Working knowledge of tidal streams in river trade limits.
- (h) Voyage planning and navigation for all conditions, by day and by night, taking into account various constraints between various ports and anchorages in river trade limits including the use of Traffic Separation Schemes and the use of routeing in accordance with the General Provisions on Ships' Routeing.
- (i) The selection of suitable anchorages, approaching anchorages and entering narrow channels in river trade limits.
- (j) Thorough knowledge of and ability to use ECDIS.

Note: Questions may be set in this paper requiring descriptive answers as well as work on the chart provided. Oral questions, which may relate to any part of the syllabus, may also be asked.

#### Part B (Oral and Practical)

##### ***Meteorology (oral examination)***

*Function : Navigation at the operational level*

*Competence : Plan and conduct a passage and determine position*

<b>Content of Examination</b>	<b>Criteria for Satisfactory Examination</b>
<p>Ability to use and interpret information obtained from shipborne meteorological instruments.</p> <p>A basic knowledge of meteorology so as to appreciate the probable changes in local weather, including tropical storms and other strong winds, and to know the conditions that may give rise to fog and other restricted visibility. The reporting system and recording systems of the weather.</p> <p>Ability to apply the meteorological information available.</p>	<p>Measurement and observations of weather conditions are accurate and appropriate to the passage. Meteorological information is correctly interpreted and applied.</p>

Knowledge of the availability of local weather forecasts including the use of local storm signals.	
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***Seamanship and Safety (oral and practical examination)***

*Function (1) : Navigation at the operational level*

*Competence (i) : Manoeuvre the ship*

***Ship manoeuvring and handling***

<b>Content of Examination</b>	<b>Criteria for Satisfactory Examination</b>
<p>Manoeuvring and berthing alongside quays, jetties and other ships including the knowledge of the effects of deadweight, draught, trim, speed and under-keel clearance on turning circles and stopping distances; the effects of wind and current on ship handling; manoeuvre and procedures for the rescue of person overboard; and squat, shallow water and similar effects.</p> <p>Proper procedures for anchoring and mooring. Anchors and cables and their stowage.</p> <p>Preparations for getting under way. Duties prior to proceeding to sea, making harbour, and entering a dock. Mooring alongside quays, jetties and other ships and securing to buoys.</p> <p>Helm orders, conning a ship.</p> <p>Knowledge of small ship power plants.</p>	<p>Safe operating limits of ship propulsion, steering and power systems are not exceeded in normal manoeuvres. Adjustments made to the ship's course and speed maintain safety of navigation.</p>

*Competence (ii) : Maintain a safe navigational watch*

***Watchkeeping***

<b>Content of Examination</b>	<b>Criteria for Satisfactory Examination</b>
<p>Thorough knowledge of the content and application of the International Regulations for Preventing Collisions at Sea with particular emphasis on their interpretation and application in high traffic density areas including multi-ship collision risk situations.</p> <p>Buoyage and wreck marking systems in use in the river trade limits.</p>	<p>The conduct, hand over and relief of the watch conforms with accepted principles and procedures.</p>

<p>Knowledge of the practical application of the “Principles to be observed in keeping a navigational watch” contained in the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers.</p> <p>Thorough knowledge of effective bridge team work procedures.</p> <p>Knowledge of the principles of magnetic and gyro compasses. Determination of magnetic and gyro-compass errors by terrestrial means and to allow for such errors by terrestrial means.</p> <p>Ability to operate the echo-sounder and apply the information correctly.</p> <p>Knowledge of the use of all deck appliances including emergency steering gear.</p> <p>Knowledge of steering control system, operational procedures and change-over from manual to automatic control and vice-versa. Adjustment of controls for optimum performance.</p> <p>Knowledge of the following Ordinances, and regulations made thereunder, with special reference to the duties and obligations of masters of vessels operating in river trade limits, including offences and penalties:</p> <p>(i) Merchant Shipping Ordinance. (ii) Shipping and Port Control Ordinance.</p> <p>Knowledge of the contents of Marine Department Merchant Shipping Notices and current Marine Department Notices.</p>	
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*Competence (iii) : Respond to a distress signal at sea*

### ***Search and rescue***

<b>Content of Examination</b>	<b>Criteria for Satisfactory Examination</b>
The use and care of life-saving appliances, knowledge of the contents of the International Aeronautical and Maritime Search and Rescue	The distress or emergency signal is immediately recognized. Contingency plans and instructions in standing orders are implemented and complied with.

(IAMSAR) Manual for the SAR procedures in the river trade limits.	
The use and care of rocket and line throwing apparatus. Distress and pilot signals and the penalties for misuse.	

*Competence (iv) : Respond to emergencies*

<b>Content of Examination</b>	<b>Criteria for Satisfactory Examination</b>
<p>Precautions for the protection and safety of passengers in emergency situations.</p> <p>Action to be taken following collision or grounding to safeguard the vessel, passengers and crew and to minimise pollution of the marine environment; and the initial damage assessment and control.</p> <p>Appreciation of the procedures to be followed for rescuing persons from the sea, assisting a ship in distress, responding to emergencies which arise in port.</p> <p>Actions to be taken in the event of partial loss of intact buoyancy.</p> <p>The use and care of fire-fighting appliances including self-contained breathing apparatus.</p>	<p>The type and scale of the emergency is promptly identified, and initial actions and if appropriate, manoeuvring of the ship are in accordance with contingency plans and are appropriate to the urgency of the situation and nature of emergency.</p>

*Function (2) : Controlling the operation of the ship and care for persons on board at the operational level*

*Competence (i) : Ensure compliance with pollution prevention requirements*

***Prevention of pollution of the marine environment and anti-pollution procedures***

<b>Content of Examination</b>	<b>Criteria for Satisfactory Examination</b>
<p>Knowledge of the precautions to be taken to prevent pollution of the marine environment.</p> <p>Anti-pollution procedures and all associated equipment.</p>	<p>Procedures for monitoring shipboard operations and ensuring compliance with MARPOL requirements are fully observed.</p>

*Competence (ii) : Monitor compliance with legislative requirements*

<b>Content of Examination</b>	<b>Criteria for Satisfactory Examination</b>
<p>Basic working knowledge of the relevant IMO Conventions concerning safety of life at sea, security and</p>	<p>Legislative requirements relating to safety of life at sea, security and protection of the marine environment are</p>

protection of the marine environment.	correctly identified.
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*Competence (iii) : Others*

Content of Examination	Criteria for Satisfactory Examination
Knowledge of the Code of Safe Working Practices for the Safety of Merchant Seamen.	Appropriate safety and protective equipment is correctly used.
Knowledge of personal survival techniques, fire prevention and ability to fight and extinguish fires, elementary first aid, and personal safety and social responsibilities.	Procedures and safe working practices designed to safeguard personnel, the ship, and the environment are observed at all times.
Knowledge of deck officer watchkeeping in port contained in the STCW Code.	Initial and follow-up actions on becoming aware of an emergency conform with established emergency response procedures.
	The conduct, hand over and relief of the watch conforms with accepted principles and procedures.

## 8.4 Certificate of Competency (Deck Officer) (River Trade) Class 2

### Part A

#### ***Paper 1 - Business and Law (2-hour)***

*Function : Controlling the operation of the ship and care for persons on board at the management level.*

*Competence (i) : Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and the protection of the marine environment.*

<p><i>Criteria : Procedures for monitoring operations and maintenance comply with legislative requirements. Planned renewal and extension of certificates ensures continued validity of surveyed items and equipment.</i></p>
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- Certificates and other documents required to be carried aboard ships by international conventions, how they are obtained and their period of validity. Registration of ships. The certificate of registry and its legal significance.
- Responsibilities under the relevant requirements of the International Convention on Load line. Loadline marks, entries and reports in respect of freeboard, draught and allowances.
- Responsibilities under the relevant requirements of the International Convention for the Safety of Life at Sea.
- Knowledge of responsibilities under the International Convention for the Prevention of Pollution from ships; methods and aids to prevent pollution of the marine environment by ships.

- (e) Responsibilities under international instruments affecting the safety of the ship passengers, crew and cargo.
- (f) Local legislation for implementing international agreements and conventions. Knowledge of the Merchant Shipping and the Shipping and Port Control Ordinances and regulations made thereunder, in respect of the duties and liabilities of the master and owners of a Hong Kong registered ship.
- (g) Contracts of employment, wages and other remuneration, advances and allotments.
- (h) Engagement, discharge and management of crew.
- (i) The Official Log Book and the law relating to entries.
- (j) Offences relating to misconduct, to endangering the ship and against persons aboard.
- (k) Discipline and the treatment of disciplinary offences. Civil liability for offences.
- (l) Entering and clearing ship.
- (m) The safety of the ship, crew and passengers. Assistance to vessels in distress and salvage. Duties in case of collision, stranding or other casualties.
- (n) The law relating to the reporting of dangers to navigation.
- (o) Knowledge of shipping practices and documents.
- (p) Knowledge of the express and implied conditions and statutory terms contained in a contract of marine insurance.

***Paper 2 - Shipboard Operations (1½ -hour)***

*Function : Controlling the operation of the ship and care for persons on board at the management level*

*Competence (i) : Maintain safety and security of the ship's crew and passengers and the operational condition of life-saving, fire-fighting and other safety systems*

*Criteria : Procedures for monitoring fire detection and safety systems ensure that all alarms are detected promptly and acted upon in accordance with established emergency procedures.*

- (a) Inspection and maintenance of ships and the life-saving, fire-fighting and other safety systems. General repairs, preparation of repair lists. Dry docking routine.
- (b) Organisation and training of crew both for routine and emergency duties including fire and abandon ship drills. Damage control and fire-fighting plans. Emergency station lists.

- (c) Preparation for Safety Equipment, Safety Construction, Load Line, and Passenger and Safety surveys. Knowledge of the significance of the certificates issued.

*Competence (ii) : Organize and manage the crew*

*Criteria : The crew are allocated duties and informed of expected standards of work and behaviour.*

- (d) A knowledge of related international maritime conventions and recommendations and local legislation.
- (e) Crew accommodation. Hygiene of the ship and welfare of the crew. Inspection and reports.

*Competence (iii) : Develop emergency and damage control plans and handle emergency situations.*

*Criteria : Emergency procedures are in accordance with the established plans for emergency situations.*

- (f) Preparation of contingency plans for response to emergencies.
- (g) Ship construction including damage control.
- (h) Methods and aids for fire prevention, detection and extinction.
- (i) Functions and use of life-saving appliance.
- (j) The methods and aids for prevention of pollution by ships and the keeping of records.
- (k) Dangers of entering enclosed spaces.

***Paper 3 - Ship Construction, Stability & Engineering Knowledge (3-hour)***

*Function (1) : Controlling the operation of the ship and care for persons on board at the management level*

*Competence (i) : Control trim, stability and stress*

*Criteria : Stability and stress conditions are maintained within safe limits at all times.*

***Ship Construction***

- (a) Understanding of fundamental principles of ship construction and the theories and factors affecting trim and stability and measures necessary to preserve trim and stability.
- (b) Testing of tanks and other watertight work.
- (c) Bilge and ballast line systems.

- (d) Stress in ships in a seaway or due to loading and ballasting. A knowledge of the parts of a ship especially strengthened to withstand such stresses.
- (e) Methods of compensating for discontinuity of strength.
- (f) Knowledge of:
  - Classification of ships,
  - Periodic surveys for retention of Class,
  - Tonnage certificates and their purpose,
  - Requirements of the Load Line rules, period and conditions of validity of the certificate and an understanding of those aspects of the conditions of assignment which affect the stability and seaworthiness of a ship.
- (g) Permeability of a compartment, the effect of bilging and flooding an end or a midship compartment, on or off the centreline.
- (h) Hull subdivision; methods adopted to maintain integrity of divisions and openings in the hull.
- (i) Principles of damage control.
- (j) Arrangements for restricting the spread of fire.

### ***Ship Stability***

- (k) Bilging; the effect on trim and stability of a ship in the event of damage to and consequent flooding of a compartment and the counter measures to be taken.
- (l) Knowledge of IMO recommendation concerning ship stability.
- (m) An understanding of the factors affecting the shape of a curve of statistical stability and the significance of the area under the curve.
- (n) Determination of the centre of gravity of a ship for different conditions of loading and ballasting.
- (o) The effect on the centre of gravity of adding, removing, shifting and suspending weights.
- (p) Transverse Metacentre, Metacentric Height. Free surface of liquids (without proof or calculation) and its effect on stability.
- (q) Change of draught and trim due to loading, discharging and shifting weights (MCTC and LCF given). Load lines and an understanding of those aspects of the conditions of assignment which affect the stability and seaworthiness of a ship.
- (r) Use of stability and trim diagrams and stress calculating equipment, including automatic data-based (ADB) equipment to keep hull stress within acceptable limits.
- (s) Dangers to a ship inherent in a heavy list, precautions when righting.
- (t) Stability and trim when dry docking or grounding.

*Function (2) : Navigation at the management level*

*Competence (i) : Operate remote controls of propulsion plant and engineering systems and services*

*Criteria : Plant, auxiliary machinery and equipment is operated in accordance with technical specifications and within safe operating limits at all times.*

***Engineering Knowledge***

- (a) Operating principles of marine power plants and the transmission of main engine power. Manoeuvring procedures.
- (b) A general knowledge of diesel machinery, auxiliary machinery such as air-compressors, generators and pumps.
- (c) General knowledge of marine engineering terms.
- (d) Steering systems, including emergency steering.
- (e) Bridge control of main engines.
- (f) Fire detection and extinction systems and procedures; general principles and practical application.
- (g) Pollution; the prevention of pollution and the master's duties, obligations and liabilities, including the keeping of records.
- (h) Maintenance of operational conditions of life-saving, fire-fighting and other safety systems.

***Paper 4 - Navigational Aids & Instruments (2-hour)***

*Function (1) : Navigation at the management level*

*Competence (i) : Determine and allow for compass errors*

*Criteria : The method and frequency of checks for errors of magnetic and gyro-compasses ensures accuracy of information.*

- (a) Knowledge of the principles of magnetic compass. The construction, siting, care, maintenance and errors of the magnetic compass and associated equipment. Causes of deviation. An appreciation, without calculation, of the effects of permanent magnetism and induced magnetism. The siting of magnetic material and electrical appliances with reference to the magnetic compass.
- (b) Knowledge of the principles of the gyro-compass. Errors associated with the gyro-compass for which adjustments can be made by the user. The principal parts of a gyro-compass and how to operate the better known gyro-compasses. Master gyro and main types of gyro-compasses.

*Competence (ii) : Determine position and the accuracy of resultant position fix by any means*

<p><i>Criteria : The primary method chosen for fixing the ship's position is the most appropriate to the prevailing circumstances and conditions. The accuracy of the resulting fix is properly assessed.</i></p>
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- (c) Use of Global Positioning System to obtain ship's position with knowledge of its operating principles, limitations, sources of error, detection of misrepresentation of information and method of correction to obtain accurate position fixing.
- (d) Radar; operating principles, sources of error, characteristics, application, capabilities and, limitations. Assessment of performance. Knowledge of the Marine Radar Performance Specifications and of Merchant Shipping Notices relating to radar and its use.
- (e) Principle and practical application of echo sounding devices, logs and speed indicators. The use of operational controls on an echo sounder and a knowledge of the sources and effects of noise which might interfere with the display of soundings.

## Part B

### ***Seamanship and Safety (Oral and Practical)***

*Function (1) : Navigation at the management level*

*Competence (i) : Respond to navigational emergencies*

<b>Content of Examination</b>	<b>Criteria for Satisfactory Examination</b>
<p>Precautions when beaching a ship in the river trade limits.</p> <p>Action to be taken if grounding when grounding is imminent and after grounding, leaks, fire, explosion and methods of refloating with or without assistance.</p> <p>Action to be taken if collision is imminent and following collision or after sustaining damage of any kind or impairment of the watertight integrity of the hull by any cause.</p> <p>Assessment of damage control. Emergency steering.</p> <p>Emergency towing arrangement and towing procedures.</p> <p>Exceptional circumstances such as the loss of a rudder or propeller.</p> <p>Steps to be taken when disabled and in distress with particular reference to river</p>	<p>The type and scale of any problem is promptly identified and decisions and actions maximize the safety of persons on board and minimize the effects of any malfunction of the ship's systems.</p>

trade limits.	
Protection and safeguard of all persons and crew in the event of wreck and other emergencies.	
Abandoning ship and passenger control in various emergency situations.	
Assisting a ship or an aircraft in distress.	
Rescuing the crew of a disabled ship or from rescue boats and survival craft.	
Launching of rescue boat or survival craft in all conditions.	

*Competence (ii) : Manoeuvre and handle a ship in all conditions*

<b>Content of Examination</b>	<b>Criteria for Satisfactory Examination</b>
<p>Manoeuvring and handling a ship in all conditions, including:</p> <ol style="list-style-type: none"> <li>1 manoeuvres when approaching pilot stations and embarking or disembarking pilots with due regard to weather, tide, headreach and stopping distances</li> <li>2 handling ship in rivers, estuaries and restricted waters, having regard to the effects of current, wind and restricted water on helm response</li> <li>3 application of constant rate of turn techniques</li> <li>4 manoeuvring in shallow water, including the reduction in under-keel clearance caused by squat, rolling and pitching</li> <li>5 interaction between passing ships and between own ship and nearby banks (canal effect)</li> <li>6 berthing and unberthing with a single or twin screw under various conditions of wind, tide and current with and without tugs</li> <li>7 ship and tug interaction</li> <li>8 use of propulsion and manoeuvring systems</li> </ol>	<p>All decisions concerning berthing, unberthing, anchoring and ships manoeuvres are based on proper assessments of ship's manoeuvring, engine characteristic and the forces and external factors to be expected.</p>

<p>9 dry-docking, both with and without damage</p> <p>10 management and handling of ships in heavy weather, including assisting a ship or aircraft in distress, towing operations, means of keeping an unmanageable ship out of trough of the sea, lessening drift and use of oil</p> <p>11 precautions in manoeuvring to launch rescue boats or survival craft in bad weather</p> <p>12 methods of taking on board survivors from rescue boats and survival craft</p> <p>13 ability to determine the manoeuvring and propulsion characteristics of common types of ships with special reference to stopping distances and turning circles at various draughts and speeds</p> <p>14 importance of navigating at reduced speed to avoid damage caused by own ship's bow wave and stern wave</p> <p>15 use of and manoeuvring in and near, traffic separation schemes and in vessel traffic service (VTS) areas.</p> <p>Anchoring with one or two anchors and working anchors and cables in all circumstances including dragging anchor, clearing foul hawse, hang-off of anchor, breaking/slipping cables and carrying out of anchor with boats. Choice of anchorage.</p>	
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*Competence (iii) : Establish watchkeeping arrangements and procedures*

<b>Content of Examination</b>	<b>Criteria for Satisfactory Examination</b>
Regulations for the Prevention of Collisions at Sea with particular emphasis on their interpretation and application in high traffic density areas including multi-ship collision risk situations.	Watchkeeping arrangement and procedures are established and maintained in compliance with international regulations and guidelines so as to ensure safety of navigation, protection of marine environment and safety of ship and persons on board.

<p>Buoyage and wreck marking systems in use in the river trade limits.</p> <p>Thorough knowledge of the content, application and intent of the Basic Principles to be observed in keeping a Navigational watch. Effective bridge teamwork procedures.</p> <p>Use of reporting in accordance with the General Principles for Ship Reporting Systems and with VTS procedures.</p> <p>Knowledge of the contents of the Shipmaster's Guide issued by the Marine Department.</p>	
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*Competence (iv) : Co-ordinate search and rescue operations*

<b>Content of Examination</b>	<b>Criteria for Satisfactory Examination</b>
Knowledge of and ability to apply the procedures contained in the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual.	<p>The plan for co-ordinating search and rescue operations is in accordance with international guidelines and standards.</p> <p>Radio communications are established and correct communication procedures are followed at all stages of the search and rescue operations.</p>

*Function (2) : Controlling the operation of the ship and care for persons on board at the management level*

*Competence (i) : Maintain safety and security of ship's crew and passengers and the operational conditions of life-saving, fire-fighting and other safety systems.*

<b>Content of Examination</b>	<b>Criteria for Satisfactory Examination</b>
<p>Measures to be taken to prevent the spillage of oil when bunkering or transferring oil.</p> <p>Prevention of fire at sea and in port. Methods used to prevent the spread of fire. Organization and direction of fire-fighting, lifeboat and liferaft preparation parties.</p> <p>Knowledge of the regulations concerning life-saving and fire-fighting appliances.</p>	<p>Procedures for monitoring fire detection and safety systems ensure that all alarm are detected promptly and acted upon in accordance with established emergency procedures.</p>

*Competence (ii) : Organize and manage the crew*

<b>Content of Examination</b>	<b>Criteria for Satisfactory Examination</b>
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A knowledge of personnel management, organization and training on board ships.	The crew are allocated duties and informed of expected standards of work and behaviour.
Routine inspections of living quarters and store rooms.	Training objectives and activities are based on an assessment of current competence and capabilities and operational requirements.

## 8.5 Certificate of Competency (Deck Officer) (River Trade) Class 1

### *Oral/Practical Examination*

The syllabus for this examination is the same as that for the oral/practical examination at **Part B** of the Class 2 examination. For Class 1, however the candidate will be expected to answer in depth and from the perspective that would be expected of a candidate for command.

## **CHAPTER 9**

### **REVALIDATION OF CERTIFICATES**

#### **9.1 Introduction**

- 9.1.1 All certificates of competency (deck officer) (river trade) will fall due for revalidation on the expiry date stated on the certificate. Once a certificate has been revalidated it will thereafter fall due for further revalidation upon expiry of the extended validity.

#### **9.2 Conditions to be satisfied for revalidation**

- 9.2.1 A certificate holder who wishes to revalidate his certificate must pay the appropriate fee and must:

- (a) meet the medical fitness requirements by producing a valid certificate of medical fitness;
- (b)
  - (i) have served as a master or deck officer in any coastal-going ship operating within river trade limits, other than a pleasure vessel or a fishing vessel, for at least:
    - (i-1) 12 months in total during the preceding 5 years, or
    - (i-2) 3 months in total during the preceding 6 months immediately prior to revalidating; or
  - (ii) have satisfactorily completed an approved shore based updating course; or
  - (iii) have completed approved sea service, for a period of not less than three (3) months in a supernumerary capacity, or in a lower officer rank than that for which the certificate held is valid immediately prior to taking up the rank for which it is valid; or
  - (iv) have performed functions relating to the duties appropriate to the class of certificate held which are considered to be at least equivalent to the 12 months sea service specified above. A list of appropriate functions is contained in paragraph 9.2.2.
- (c) hold a valid GMDSS Restricted Operator Certificate, or a valid GMDSS General Operator Certificate.
- (d)
  - (i) have completed, within five year prior to the expiry date of the CoC, an approved refresher training course on basic training, survival craft and rescue boats, and advanced fire-fighting; or to present a valid Certificate of Proficiency in Basic Training, a valid Certificate of Proficiency in Survival Craft and Rescue Boats other than Fast Recuse Boats, and a valid Certificate of Proficiency in Advanced Fire-Fighting, or passed an assessment pursuant to the requirements in Section A-VI/1 paragraph 3, A-VI/2 paragraph 5, and A-VI/3 paragraph 5 of STCW Code, as amended; or
  - (ii) the above STCW 5-yearly refresher course requirements for seagoing seafarers be waived for the river trade seafarers, provided that the following conditions are met with:

- For any river trade rating: has HSC shipboard service record for at least an accumulative period of 12 months during every 5-year period counting from the issuance date of the rating's most recent valid safety training record;
- For any officer holding river trade certificate of competency: holds a valid TRC (Master, C/O, NVO, or Engineer).

River trade seafarers who fail to provide evidence of meeting sub-paragraph (d) (ii), need to complete a refresher course, or hold valid Certificates of Proficiency described in above.

9.2.2 If the holder of certificate is unable to demonstrate the above sea service he/she may revalidate his/her certificate of competency (deck officer) (river trade) by demonstrating at least 30 months' employment in an occupation the Director considers equivalent to sea service, in the 5 years immediately prior to revalidating his/her Certificate of competency (deck officer) (river trade). Occupations will be considered equivalent if applicant can demonstrate proficiency by virtue of having performed functions relating to the duties appropriate to certificate of competency (deck officer) (river trade) held. A list of occupations which will be favourably considered is given below:

- Marine Department surveyors of ships, assistant surveyors of ships, and examiners;
- marine superintendents;
- Marine Department marine officers, assistant marine officers;
- ship surveyors, cargo surveyors, hydrographic surveyors;
- lecturers / instructors in nautical studies at nautical colleges or relevant institutes;
- Dock masters, harbour masters and berthing officers;
- Dredging superintendents;
- Licensed pilots, pilot superintendents.

9.2.3 The list of alternative occupations in paragraph 9.2.2 is not exhaustive and application for revalidation from certificate holders who have been engaged in other activities will be considered by the Director on their merits. Original company letter(s) demonstrating thirty (30) months in an acceptable occupation must detail applicant's role(s), responsibilities and dates of service. He/she must demonstrate that he/she has performed functions relating to the duties appropriate to the class or grade of certificate his/her hold. Applicants must also have completed the training courses in paragraph 9.2.1 (d).

9.2.4 Additional information concerning the procedure for revalidation may be obtained from the River Trade and Local Examination Section.

9.2.5 Applications for revalidation from certificate holders abroad may be made by post or email to the River Trade and Local Examination Section and should include all evidence and supporting documents showing qualifications obtained as per stipulated in paragraph 9.2.1 and 9.2.2, such as

- (a) Certificate of competency
- (b) Medical fitness certificate
- (c) Fee
- (d) Records of sea service or shore employment as appropriate
- (e) GMDSS certificate
- (g) Evidence of qualifications obtained as per item (d) of paragraph 9.2.1 for the maintenance of proficiency.

9.2.6 Candidates who are the holder of seagoing certificate of competency issued /

recognized by the Director and serving on coastal-going ships may be unable to revalidate their seagoing certificates of competency in accordance with Convention requirements for seagoing services. These candidates can apply for the exemption from undergoing the appropriate examination specified in Chapter 7 for the grant of the same class of river trade certificate of competency before the expiry of their seagoing certificate of competency provided that the candidates have met other requirements specified in Chapter 5, have served not less than twelve (12) months on coastal-going ships in the preceding five (5) years and have a company letter stating their posts, responsibilities and duration of their services. Applicants for exemption will be required to pay the appropriate examination fees (same as the fee of full examination for the same class certificate of competency (river trade)) before verify their eligibility for exemption.

### **9.3 Revalidation of expired Certificate of Competency**

- 9.3.1 In addition to fulfilling the prerequisite requirement laid down in paragraph 9.2 of Chapter 9 and presenting a valid medical fitness certificate, the following conditions shall be met as appropriate.
- 9.3.2 Holders of a certificate of competency (deck officer) (river trade) expired within the last 10 years shall pass an approved oral examination relating to the development and requirements of international maritime conventions before revalidation processing. After passed an approved oral examination, the expired Certificate of competency may be revalidated as above procedures in paragraph 9.2.
- 9.3.3 Holders of a certificate of competency(deck officer) (river trade) expired for more than 10 years but within 20 years shall pass a Class 3 oral examination before a temporary certificate of competency (deck officer) (river trade) Class 3 is issued for a period of six (6) months. The holders of temporary certificate of competency (deck officer) (river trade) class 3 have to complete a 3-month river trade service and passed an oral examination for the original class of their certificate of competency (deck officer) (river trade) before the same class of certificate of competency (deck officer) (river trade) is issued.
- 9.3.4 Holders of a certificate of competency (deck officer) (river trade) in any class expired for over 20 years shall pass all the written examinations for general ship knowledges and an oral examination respectively before the original class of certificate of competency (deck officer) (river trade) is issued.

## **CHAPTER 10**

### **TYPE RATING CERTIFICATE (TRC) FOR DYNAMICALLY SUPPORTED CRAFT (DSC) OR HIGH-SPEED CRAFT (HSC)**

#### **10.1 General**

- 10.1.1 Any deck officer manning a station on any passenger DSC/HSC or any cargo DSC/HSC of 500 gross tonnage and upwards shall, in addition to the appropriate certificate of competency, be required to hold a valid TRC of appropriate rank for the type and model of craft in which he intends to serve. Operations between 30 minutes after sunset and 30 minutes before sunrise shall, in addition to the appropriate TRC, be required to obtain Night Service Approval (NSA) endorsement for such night operations.
- 10.1.2 The TRC should be revalidated every two years.
- 10.1.3 In order to maintain NSA an officer must perform sea service of at least 10 nights in any three-month period. If the officer does not fulfil this requirement, the NSA will be invalid. The officer shall undertake further night service re-familiarization on board of not less than 6 night trips before passing NSA practical examination conducted by the examiner of Marine Department (MD).

#### **10.2 Type Rating Certificate**

- 10.2.1 In order to qualify for the issue of a TRC, an applicant must:
- (a) hold an appropriate certificate of competency or a licence issued under the Merchant Shipping (Seafarers)(Certification of Officers) Regulation;
  - (b) have satisfactorily completed an approved training course on the type and model of DSC or HSC for which the TRC is required;
  - (c) pass the TRC examination specified in paragraph 10.2.2;
  - (d) produce a valid certificate of medical fitness;
  - (e) (for master and chief mate only) - have attended an approved HSC Radar Simulator course (Relaxation of this requirement will be considered if courses are unavailable, TRC will be issued with only 6 months validity and the applicant shall complete the simulator course as soon as possible); and
  - (f) pay the appropriate fee.
- 10.2.2 Examination for Type Rating Certificate
- (a) The examination will comprise an oral and practical handling test carried out on board the type and model of craft and the intended route to which the TRC refers.
  - (b) The syllabus for TRC examination specified in paragraph 10.2.3 is written in general terms. A detailed syllabus for each particular type and model of craft will be agreed with each operating company.
  - (c) For Night Vision Officers the examination will be limited to item (h) of paragraph

10.2.3 and the operation of night vision equipment.

### 10.2.3 Syllabus for TRC Examination

- (a) A thorough knowledge of the service routes, the operational limitations of the craft and of any operating conditions and restrictions imposed by the MD.
- (b) A thorough knowledge of the structure and layout of the vessel, including stability conditions and bilge pumping arrangements.
- (c) A working knowledge of the operation of the following systems:
  - (i) Propulsion and associated systems
  - (ii) Electrical system
  - (iii) Fire protection system
  - (iv) Navigation and communication systems
  - (v) Ship control systems both in displacement and non displacement modes.
- (d) A thorough knowledge of the failure modes of the control, steering and propulsion systems and the proper response to such failures.
- (e) A thorough knowledge of the significance of and correct response to alarms and caution indicators on all wheelhouse instrumentation.
- (f) A practical handling test on the vessel to include all normal, abnormal, and emergency procedures in both displacement and non-displacement modes.
- (g) A thorough knowledge of bridge procedures.
- (h) A thorough knowledge of the use of life-saving and fire-fighting appliances on board and the arrangements for mustering, evacuating passengers and crew members in the event of an emergency.
- (i) A thorough knowledge of cargo and vehicle stowage securement systems (for cargo high-speed craft only).

## 10.3. Revalidation of Type Rating Certificate

### 10.3.1 TRC holders who wish to revalidate their certificates must:

- (a) produce evidence of at least 5 months service in the appropriate rank in the type and model of DSC or HSC to which the TRC applies, during the preceding two years. At the request of the DSC or HSC operator, and with adequate sea service which satisfy the Director, the period between revalidation examinations may be extended from 2 years to 4 years;
- (b) produce a valid medical fitness certificate;
- (c) pass the revalidation examination specified in paragraph 10.3.2 or satisfy the Director via an approved revalidation training or simulator assessment as to their continued proficiency in operating the type and model of DSC or HSC to which the TRC refers; and
- (d) pay the appropriate fee.

### 10.3.2 Examination for TRC Revalidation

- (a) The examination will comprise an oral and practical handling test carried out on board the type and model of craft and the specified route to which the TRC refers

or be in the form of simulator assessment provided by the Marine Department upon request by the DSC of HSC operator subject to the availability of the simulator.

- (b) The syllabus for TRC revalidation examination is specified in paragraph 10.3.3.
- (c) For Night Vision Officers the examination will be limited to item (h) of paragraph 10.2.3 and item (a)(iv) of paragraph 10.3.3.

#### 10.3.3 Syllabus for TRC Revalidation Examination

- (a) In addition to the syllabus specified for the TRC Examination at paragraph 10.2.3, the assessment will be emphasized on the following aspects:
  - (i) Knowledge of changes in operational limitations of the craft.
  - (ii) Knowledge of updated information on operating conditions and restrictions imposed by MD, including Marine Department Notices and other publications.
  - (iii) Knowledge of modifications concerning the structure, equipment, machinery, control and safety systems of the craft.
  - (iv) Knowledge of changes in emergency procedures and arrangements.
  - (v) Knowledge of the lessons or experience learned from recent casualties, accidents and breakdowns.
- (b) Also, the candidate is expected to have a more in-depth knowledge of the operational systems, to be more sophisticated in practical ship handling and more conversant in dealing with emergency situations and breakdowns.

### 10.4 Night Service Approval (NSA)

#### 10.4.1 Master or Deck Officer who wish to obtain NSA must:

- (a) produce evidence of at least 3 months day service in the appropriate rank in the type and model of DSC or HSC to which the TRC applies (Night Vision Officer is not required to produce this evidence);
- (b) have satisfactorily completed an approved night service training course for the type and model of DSC or HSC for which the TRC is required;
- (c) pass the examination specified in paragraph 10.4.2; and
- (a) pay the appropriate fee.

Or

- (a) have obtained an initial Night Service endorsement on TRC by examination;
- (b) produce evidence of Night Service familiarization training of not less than 3 round trips provided by the shipping companies prior to being placed on night service on another type of HSC. Period for completing the 3 round trips will be decided by the shipping companies to suit their own operational requirements; and
- (c) pay the appropriate fee.

#### 10.4.2 Examination for NSA

- (a) The examination is to assess the Master or Deck Officer on the procedures to be used for night operations and how to use the night service equipment. The

operating officers, except Night Vision Officer, must have been type rated for the type and model of craft before training for night service.

- (b) The examination will comprise an oral and practical handling test carried out at night time on board the type and model of craft and the intended route to which the TRC refers.
- (c) The syllabus for NSA examination is specified in paragraph 10.4.3.

#### 10.4.3 Syllabus for NSA Examination

- (a) A thorough knowledge of the operation of night service equipment.
- (b) A thorough knowledge of the night service operational procedures.
- (c) A thorough knowledge of the night service routes.
- (d) A thorough knowledge of operating conditions and restrictions on night service operation imposed by the Marine Department.

### 10.5 Application for Type Rating Examination

- 10.5.1 Any application for Type Rating Certificate, Revalidation of Type Rating Certificate and Night Service Approval should be made in writing to:

River Trade and Local Examination Section  
Marine Department  
3/F, Harbour Building  
38 Pier Road  
Central  
Hong Kong

- 10.5.2 Examination appointment is to be mutually agreed subject to the availability of an examiner. Applications should be made well in advance of the date of examination and a vessel of appropriate type and model should be available.

**Appendix I**

**STANDARD FORM OF DOCUMENT AND CERTIFICATE**

**FORM 1**

**Page x of xx**

**Watchkeeping Duty Record Certificate for HSC Officer, Cadet and Rating, etc.**

Date	Time Dep/Arr	Voyage From/To	Ship Name Official No.	Trip No.	Hour of Watch*	Master's Name	Master's Signature	Remarks

\* To be rounded up to hours in one decimal if applicable;

Total hours of watchkeeping duties: \_\_\_\_\_

Grand total hours: \_\_\_\_\_

## **Appendix II**

### **Standard Form of Documents**

#### **SEA SERVICE TESTIMONIAL**

(Name and address of shipping company)

I certify that the following is a full and true statement of the sea service performed by

under my supervision in MV/HSC

O.N.

Period of Service (Dates)		Rank of officer and actual seniority on watch	Type of Vessel	Gross Tonnage
From	To			

During the whole period stated the above deck officer\*/ cadet \* accrued the following bridge watchkeeping service for not less than \_\_\_\_\_ hours out of every \_\_\_\_\_ hours whilst the vessel was engaged on unlimited\*/ coastal\* voyages:

Weeks

Days

In addition, the above named cadet / officer:

- (a) regularly carried out other duties in connection with the routine and maintenance of the ship
- (b) was granted no leave of absence
- (b) was granted \_\_\_\_\_ days of leave whilst still on crew agreement.

Report as to ability

Report as to conduct

Report as to sobriety

Signature of Master

(Technical Manager

( or

Signature of (Marine Manager

( or

(other representative of owners

This form should be used when the deck officer/cadet concerned, or the Master, leaves a ship.

\* Delete as appropriate