

CERTIFICATES OF COMPETENCY IN THE
MERCHANT NAVY (MARINE ENGINEER OFFICER
REQUIREMENTS) 1983

1983

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**CERTIFICATES OF COMPETENCY IN
THE MERCHANT NAVY (MARINE
ENGINEER OFFICER REQUIREMENTS)
RULES 1983**

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PART II

CLASSES OF CERTIFICATES OF COMPETENCY
AND CONDITIONS OF ENTRY

3. Certificates of Competency.

The following Certificate of Competency may be granted under these Rules:

- (a) the Steam Certificate qualifying the holders to serve as Engineer Officers in the classes certified in steamships;
- (b) the Motor Certificate qualifying the holders to serve as Engineer Officers in the classes certified in motorship;
- (c) the Combined Certificate qualifying the holders to serve as Engineer Officers in the classes certified in both steamships and motorships and in ships propelled by gas turbines.

4. Qualifications required for Second Class Engineers Certificate of Competency.

To qualify for a Second Class Engineers Certificate of Competency a candidate must—

- (a) satisfy the initial training requirement set out in Part III;
- (b) have completed the qualifying sea service set out in Part IV;
- (c) have attended an approved fire-fighting course;
- (d) have attended an approved First Aid course;
- (e) pass the examination set out in Part VI.

5. Qualifications required for a First Class Engineers Certificate of Competency.

To qualify for a First Class Engineers Certificate of Competency a candidate must—

- (a) hold a valid Second Class Engineers Certificate of Competency;
- (b) have completed the qualifying sea service set out in Part IV while holding a Second Class Engineers Certificate of Competency;
- (c) pass the examination set out in Part VI.

PART III

INITIAL TRAINING

6. Initial training.

A candidate must have—

- (a) completed one of the approved courses of training as an Engineer Cadet; or
- (b) completed four years of engineering craft training which may include full time education between the ages of 16 to 17 years and

must include one year off-the-job training in the use of tools and techniques of general engineering craft practice at an industrial centre approved by the Surveyor General of Ships; or

- (c) satisfactorily completed a full time course of study of at least the standard of a Higher National Diploma in Mechanical or Marine Engineering approved or recognised by the Surveyor General of Ships for a period of not less than three years at a polytechnic or university together with 18 months engineering training relevant to the duties of a sea-going engineer officer.

7. Training before the age of 16 not acceptable.

Workshop service or other training completed before the age of 16 years shall not be accepted.

8. Deficiency in training.

Any deficiency from the requirements in rule 6 will be assessed in each case by the Surveyor General of Ships and shall be made up—

- (a) by off-the-job training; or
- (b) by further workshop service of a suitable character; or
- (c) by compensatory shipboard service as an engineer officer or trainee officer as the case may be.

9. Compensatory shipboard service.

(1) Compensatory shipboard service must be performed either on regular watch or on day work in ships of not less than 350 KW power and time so spent on such ships will be accepted as having two-thirds of the value of suitable workshop service.

(2) The period of compensatory shipboard service required shall not exceed six years.

(3) Compensatory sea service performed before the age of 20 years shall not be accepted.

10. Testimonials.

(1) All candidates are required to produce testimonials covering their service.

(2) The testimonials must be signed by the employer or his representative.

(3) Testimonials shall be returned to candidates when the examination is completed.

11. Training outside Malaysia.

• Training outside Malaysia is acceptable subject to the conditions set out in this Part but any such training assessed under rule 8 will only be accepted under special circumstances where the Department is in close liaison with the college or university concerned and has given formal approval of its training.

QUALIFYING SEA SERVICE

12. Qualifying sea service for candidates for a Second Class Engineers Certificate of Competency.

Candidates for a Second Class Engineers Certificate of Competency must, in addition to the requirements for initial training set out in Part III, have completed the following period of qualifying sea service in ships of not less than 750 KW power before sitting for Part B of the examination:

- (a) for a Steam Certificate: 21 months, of which at least 9 months must have been spent on the boilers and main propelling machinery of a steamship although the remaining period may have been spent on the main propelling machinery of a steamship or a motorship or on suitable auxiliaries of any ship or on day work;
- (b) for a Motor Certificate: 21 months, of which at least 9 months must have been spent on the main propelling machinery of a motorship although the remaining period may have been spent on the main propelling machinery of a steamship or motorship or on suitable auxiliaries of any ship, or on day work;
- (c) for a Combined Certificate: 21 months, of which at least 9 months must have been spent on the boilers and main propelling machinery of a steamship and at least 9 months must have been spent on the main propelling machinery of a motorship while the remaining period may have been spent on either or on suitable auxiliaries of any ship or on day work.

13. Qualifying sea service for a First Class Engineers Certificate of Competency.

Candidates for a First Class Engineers Certificate of Competency must, whilst in possession of a Second Class Engineers Certificate of Competency, have completed the same period of qualifying sea service as that required in rule 12 in ships of not less than 3,000 KW power before sitting for Part B of the examination.

14. Remission of qualifying sea service.

(1) Candidates for a Second Class Engineers Certificate of Competency who have—

- (a) passed Part A of the examination for a Second Class Engineers Certificate of Competency; or
- (b) obtained a certificate, diploma or degree recognised by the Department as conferring full exemption from Part A of the examination for a Second Class Engineers Certificate of Competency;

before starting qualifying sea service, may be granted 3 months remission of qualifying sea service.

(2) Candidates for a First Class Engineers Certificate of Competency who have—

- (a) passed Part A of the examination for a First Class Engineers Certificate of Competency; or
- (b) obtained a certificate, diploma or degree recognised by the Department as conferring full exemption from Part A of the First Class Engineers Certificate of Competency;

before starting qualifying sea service, may be granted 3 months remission of qualifying sea service.

15. Sea service in ships not underway for considerable periods.

(1) When part or the whole of the sea service has been performed in ships which for considerable periods have not been under way, a statement from the owners of the ship must be produced stating the time in days the ships are actually under way.

(2) Under the circumstances set out in paragraph (1) the qualifying sea service may be reckoned as one and a half times the number of days actually spent under way but in no case can it exceed the time spent on Articles during the period concerned.

16. Sea service to be performed as Engineer Officer in charge of the watch.

(1) Subject to paragraph (2) candidates for the First Class Engineers Certificate of Competency examination shall perform the qualifying sea service as Engineer Officer in charge of the watch.

(2) Service as second in seniority on ships where three or more Engineer Officers are on regular watch at the same time will be accepted but service of lower seniority in such ships will only be accepted at half rate.

17. Sea service on ships without traditional 8-hour watchkeeping routine.

Sea service performed by Engineer Officers employed in work practices in ships operated on other than the traditional eight hour watchkeeping routine may be accepted as qualifying sea service if the Department is satisfied that such practices provide a reasonably balanced system of service.

18. Time spent on "on-call" watchkeeping.

(1) For the purpose of rule 17, when an Engineer Officer is nominated as being in sole charge of periodically unattended machinery spaces for a period of 24 hours, the time so spent on such "on-call" watchkeeping may be accepted at one and half rate and the remainder of the time on Articles will be considered as day work and allowed to count towards qualifying sea service.

(2) The total sea service accepted under the conditions set out in paragraph (1) will be either that computed in accordance with that paragraph or the time actually spent on Articles, whichever is less.

19. Work not usually performed by a watchkeeping Engineer Officer not generally acceptable.

(1) Sea service in ships where a watchkeeping Engineer Officer, as part of his regular duties, does work not usually performed by a watchkeeping Engineer Officer in the Merchant Navy is not generally acceptable.

(2) Notwithstanding paragraph (1) but subject to paragraph (3) the Department may consider cases where, although the work is of an unusual nature, it is considered pertinent to the operational experience of a Marine Engineer and in such cases the Department may accept the sea service up to a maximum of 9 months either at full rate or at some proportional rate dependent on the type of work involved.

(3) Sea service as in paragraph (1) shall not be accepted as counting towards the minimum sea service required to be spent on the boilers and main propelling machinery of a steamship or on the main propelling machinery of a motorship.

20. Time spent on auxiliary machinery acceptable.

(1) Time spent on auxiliary machinery essential to the running of the main propelling machinery of the ship will be allowed to count in full towards qualifying sea service, but subject to a maximum acceptable limit of 9 months.

(2) Time served on suitable auxiliary machinery run independently of the main propelling machinery will count at half rate, the total service so calculated being subject to a maximum acceptable limit of 9 months.

21. Day work and engineering work at sea other than on regular watch.

(1) Day work and engineering work carried out within the engine and boiler spaces of a steamship or motorship at sea, other than that performed on regular watch, will be counted towards qualifying sea service at the following rate—

(a) up to eight months: at full rate;

(b) any further period: at half rate.

(2) The total service calculated according to paragraph (1) is subject to a maximum acceptable limit of twelve months.

22. Lake or river service.

(1) Service on lakes or within smooth water limits will be accepted at half rate, but the total service so calculated is subject to a maximum acceptable limit of 15 months.

(2) Service beyond smooth water limits will be accepted at full rate.

23. Testimonials in respect of sea service.

(1) Every candidate must produce testimonials in respect of his qualifying sea service.

(2) The testimonials should state the seniority on watch, the type of main propelling machinery and the nature of the duties performed.

(3) The testimonials must be signed by the Chief Engineer and be endorsed by the Engineer Superintendent or by the Master or other representative of the owner.

(4) When the candidate has acted in the capacity of a Chief Engineer, the testimonial should be signed by the company's Engineer Superintendent or a person of responsibility within the company.

(5) When a candidate suffers from any physical or mental disability which might interfere with the proper performance of his duties as an Engineer Officer, the signatories of his testimonials should state whether such defect did in fact interfere in any way with the efficient discharge of the candidate's duties.

(6) Testimonials should as far as possible conform to the Form in the Schedule.

(7) Testimonials shall be returned to the candidate when the examination is completed.

24. Verification of sea service.

(1) Sea service which cannot be verified by proper entries in the Articles of Agreement of the ships in which the candidate has served shall not be accepted unless authenticated in the manner prescribed in paragraph (2).

(2) Proof of sea service of aliens and of Malaysian personnel serving in foreign vessels which cannot be verified by the Department shall be confirmed either by a Consular or by some other recognised official authority of the foreign country or by some responsible person having personal knowledge of the facts to be established.

25. Calculation of service.

(1) A candidate's qualifying sea service as shown by the discharges and testimonials will be reckoned by the calendar month.

(2) The number of complete calendar months from the commencement of the period should be computed after which the number of odd days should be counted.

(3) The day on which the agreement commence as well as that on which it terminates should be included, all leave of absence excluded and all odd days added together and reckoned at 30 to the month.

26. Penalty for misconduct.

Candidates or potential candidates who—

(a) after having signed crew agreements have neglected to join their vessels; or

(b) after having joined their vessels have left them other than upon discharge; or

(c) have committed misconduct on board;
will be required to produce satisfactory proof of two years subsequent service with good conduct at sea, unless the Department sees fit to reduce this period.

PART V

ADMISSION TO EXAMINATIONS AND AWARD OF CERTIFICATE

27. Application for examination.

(1) Candidates wishing to take the examination for a Certificate of Competency should complete the prescribed application form and pay the appropriate fee at a Marine Office signing the declaration on the application form in the presence of a Marine Officer.

(2) The completed form, together with the candidate's certificate of apprenticeship, testimonials, discharges, Certificate of Competency (if any) and other relevant documents, must be submitted to the examination centre at least 60 days before the commencement of the week during which the examination is to be held.

(3) A candidate may, if he prefers, submit his application and papers by post to the Marine Office at Port Klang, remitting the fees at the same time.

(4) If a candidate proceeds under paragraph (3) he will be required to sign the declaration in the application form in the presence of the Examiner at the opening of the examination.

(5) A candidate will be informed as soon as possible whether or not his application has been accepted.

(6) If a candidate's application is accepted, he will be supplied with a copy of the rules to be observed during the examination.

28. Proof of name and nationality.

Every candidate for a Certificate of Competency of any class will be required to produce proof of name, nationality and place and date of birth.

29. Knowledge of Bahasa Malaysia.

All candidates must prove to the satisfaction of the Examiner that they are sufficiently conversant with Bahasa Malaysia to perform the duties required of them on board a Malaysian vessel.

30. Penalty for offering gratuity.

(1) A candidate who offers a gratuity to any officer of the Department will be deemed to have committed an act of misconduct and will not be re-examined until a period of at least twelve months has elapsed.

(2) The penalty in paragraph (1) is additional to any penalty to which the candidate may be liable under any other law.

31. Enquiries as to eligibility for examination.

(1) A person who enquires as to his eligibility for examination shall be required to pay the prescribed fee before any step is taken to assess his service or qualifications. [Am. P.U. (A)
448/83]

(2) If the person is found to be not qualified the fee will either be returned to him or placed to his credit until he is qualified.

32. Issue of certificate.

(1) When a candidate has successfully completed all parts of the examination he will receive a Form authorising the Marine Officer to whom it is addressed to issue the certificate.

(2) Lower classes of Certificates of Competency awarded by other Governments but declared to have the same force as those granted under the Ordinance will not be returned to the successful candidates.

(3) A candidate who has not successfully completed all parts of the examination will receive a record of his examination results on a Form which must be produced to the Examiner when the candidate next presents himself for examination.

33. Copy of lost certificate.

(1) An Application for a certified true copy of a lost Certificate of Competency should be submitted on a prescribed form to the Marine Officer together with the prescribed fee.

(2) The applicant must make a declaration before the Marine Officer as to the circumstances in which the Certificate was lost.

(3) The certified true copy of the Certificate will be delivered to the applicant in due course.

(4) No fee will be charged if the applicant can show that the Certificate was lost through shipwreck or fire.

34. Re-examination.

Subject to rules 30, 35 and 36 a candidate who fails in any part of the examination may present himself for re-examination at any subsequent examination.

35. Penalty for failure in the Engineering Knowledge examination.

(1) A candidate who shows ignorance of topics which are vital to an Engineer Officer's duties and which, if neglected, could lead to acts or omissions whereby either life or the ship or both may be endangered will not be accepted for re-examination until he has performed a further period of 12 months sea service.

(2) A candidate who, during 3 attempts at the Engineering Knowledge examination in any 12 month period shows no improvement in his engi-

neering knowledge will not be accepted for re-examination until he has performed a further period of 12 months sea service.

36. Breach of examination rules.

A candidate who violates any of the examination rules will be considered to have failed and will not be accepted for re-examination for such period as may be decided by the Department.

PART VI

EXAMINATIONS AND EXEMPTIONS

37. Place and date of examination.

(1) The examination centres shall be at the ports designated by the Director of Marine.

(2) The dates of the respective examination are available from the examination centres or the Marine Office.

38. Exemptions.

(1) Candidates who have passed the terminal examination of courses specified in rule 6 to the standard required by the Department may be granted exemptions from Part A of the examinations on a subject for subject basis, the subjects being those stipulated on the terminal certificates of the course.

(2) Candidates who have completed approved courses may be granted exemptions from any part of the examination, except items (iii) and (iv) of Part B of the examination, upon application to the Surveyor General of Ships.

39. Examinations.

(1) The examination for a Second Class Engineers Certificate of Competency is divided into two Parts as follows:

(a) PART A

- (i) Applied Mechanics (one paper of 3 hours);
- (ii) Heat Engines (one paper of 3 hours);
- (iii) Mathematics (one paper of 3 hours);
- (iv) Engineering Drawing (one paper of 4 hours);

(b) PART B

- (i) Electrotechnology (one paper of 3 hours);
- (ii) Naval Architecture (one paper of 3 hours);
- (iii) Engineering Knowledge (2 papers each of 3 hours);
- (iv) Viva voce examination.

(2) The examination for a First Class Engineers Certificate of Competency is divided into two Parts as follows:

(a) PART A

- (i) Applied Mechanics (one paper of 3 hours);
- (ii) Heat Engines (one paper of 3 hours);

(b) PART B

- (i) Applied Mechanics (one paper of 3 hours);
- (ii) Naval Architecture (one paper of 3 hours);
- (iii) Engineering Knowledge (2 papers each of 3 hours);
- (iv) Viva voce examination.

(3) The examination for a Combined First Class Engineers Certificate of Competency or a Combined Second Class Engineers Certificate of Competency consists of—

- (a) Engineering Knowledge (one paper of 3 hours);
- (b) Viva voce examination.

40. Admission to examinations.

(1) A candidate may present himself for either the whole of Part A of the First Class Engineers Certificate of Competency or the Second Class Engineers Certificate of Competency or (if exempted from certain subjects) the remaining subject or subjects, at any time after he has completed the training required in Part III, except in the case of a candidate for a First Class Engineers Certificate of Competency who must in addition be in possession of a Second Class Engineers Certificate of Competency.

(2) A candidate, unless he has previously completed Part A or been exempted from it, may present himself for Part B of an examination at any time after he has completed the necessary period of qualifying sea service if he also sits for the whole of Part A of the examination at the same time.

(3) Candidates will only be allowed to sit for a Combined Certificate if they have already passed the examination for a Steam or Motor Certificate of that class.

41. Standard required in examination.

(1) A candidate must obtain a prescribed minimum number of marks in each subject in the written examinations and not less than one half of the total number of marks to secure a pass.

(2) A standard higher than that for the written examination is required in the viva voce examination.

42. Results of the examination.

The results of the examination will be communicated to the candidate by the Examiner.

SCHEDULE

FORM

SEA SERVICE

(Name and address of Shipowner
or company)

I certify that the following is a full and true statement of the sea service performed by under my supervision on board the *..... O.N.....

Period of service (Dates)		Rank of Officer and actual seniority on watch	Type of main engines and boilers (Single or twin-screw)	Nature of duties (for appropriate description see below)
From	To			

During the whole period stated above—

(a) was granted no leave of absence

(b) was granted..... days of absence whilst still on Articles

Report as to ability.....

Report as to conduct.....

Report as to sobriety.....

Signature of Chief Engineer.....

Remarks (if any).....

Engineer Superintendent.....

Signature of { or
Master or other representative of owners
.....

* Steam or motorship. Name of ship and official number.

Description of duties

- I. On fitters' work either by day or regular watch*—
 - (a) Within main engine and boiler spaces.
 - (b) Outside main engine and boiler spaces.
- II. (a) On refrigerating or other machinery not essential to the propulsion of the vessel.
- (b) On auxiliary engines separated from main propelling units but worked in conjunction therewith.
- III. On regular watch* on main engines as—
 - (a) Senior in full charge.
 - (b) First Assistant.
 - (c) Second Assistant.
- IV. On regular watch* on main boilers—
 - (a) In charge of all stokeholds.
 - (b) In charge of a section or one stokehold only.
 - (c) As Boiler Room Assistant.
- V. On regular watch* on main engines and boilers simultaneously—
 - (a) Senior in full charge.
 - (b) First Assistant.
 - (c) Second Assistant.

**On regular watch means eight hours in every twenty hours.*

In ships where watches are kept on other than the traditional system of not less than eight out of each twenty-four hours, a brief description of the duration and frequency of the watches should be given. Mention of periods on day work or on fitters' work by watch should be made. This is particularly applicable to vessels that—

1. have a centralised control room;
2. are fully or partly automated;
3. have arrangements such that the engine room is unmanned for some part of the twenty-four hours.

NOTE — It is recommended that this form should be used when the engineer reported on, or when the Chief Engineer leaves a ship.

Made the 22nd July 1983.

TAN SRI CHONG HON NYAN,
Minister of Transport