



# Government Gazette

OF

## WESTERN AUSTRALIA

(Published by Authority at 3.30 p.m.)

---

(REGISTERED AT THE GENERAL POST OFFICE, PERTH, FOR TRANSMISSION BY POST AS A NEWSPAPER)

---

No. 99]

PERTH : WEDNESDAY, 11th DECEMBER

[1963

---

Crown Law Department,  
Perth, 6th December, 1963.

THE undermentioned regulations made under the provisions of the Western Australian Marine Act, 1948, are reprinted pursuant to the Reprinting of Regulations Act, 1954, by authority of the Minister for Justice.

R. C. GREEN,  
Under Secretary for Law.

---

Western Australian Marine Act, 1948.

### Regulations for the Examination of Applicants for Masters, Mates, Coxswain, Engineers, Marine Motor Engine Drivers and Marine Surveyors.

(Published in the *Government Gazette* on 15th March, 1950, and reprinted pursuant to the provisions of the Reprinting of Regulations Act, 1954.)

Reprinted pursuant to the Reprinting of Regulations Act, 1954, by authority of the Minister dated 6th December, 1963.

(Published in the Government Gazette on the 15th March, 1950, and reprinted pursuant to section five of the Reprinting of Regulations Act, 1954.)

#### WESTERN AUSTRALIAN MARINE ACT, 1948.

#### REGULATIONS FOR THE EXAMINATION OF APPLICANTS FOR MASTERS, MATES, COXSWAIN, ENGINEERS, MARINE MOTOR ENGINE DRIVERS AND MARINE SURVEYORS.

##### General.

(1) Examinations will be held on any day of the week excepting Saturdays, Sundays and public holidays at such times as may be appointed by the examiner.

(2) The application for examination must be made in writing on the required form and be accompanied by testimonials as to service, sobriety, experience, ability and good conduct and the prescribed fee.

(3) No applicant will be examined unless he is a British subject and if required the necessary proof must be produced.

##### Mate of a Coast Trade Ship over 300 tons Gross Register.

(4) Candidates must be not less than 20 years of age, have served four years at sea and pass the examination in colours, also the Board of Trade sight test.

(5) In navigation and other subjects appertaining thereto, he must write a legible hand, understand the first five rules of arithmetic, and work out sums in the rules of compound addition, subtraction, multiplication and division. He must be able to take a bearing by compass, and be conversant with the use of Mercator's chart, and be able to find, on either a "true" or "magnetic" chart, the course to steer and the distance from one given position to another; he must be able to find the ship's position on the chart from cross bearings of two objects; and from two bearings of the same object, the course and distance between the bearings being given, to find the distance of the ship from the object at the time of taking the second bearing; to work a day's work complete correcting the course for leeway, deviation and variation; to find the latitude by the meridian altitude of the sun; to find the true azimuth of the sun by the time azimuth or A.B.C. tables, the error of the compass, also the deviation, the variation being given; to find the error of the compass by land objects; and also to find the time of high water by the tide tables, and the approximate time of high water at any place, other than by the tide tables.

(6) He must also have a fair working knowledge and pass an examination in the International Code of Signals, Morse Code and Semaphore; and an oral examination in the use and adjustments of the sextant; the use and care of barometers, thermometers, hydrometers and chronometers; the markings, signs and abbreviations on charts; and also in keeping a ship's log.

(7) In seamanship and other subjects appertaining thereto, he must possess a thorough knowledge of the rule of the road as regards both steamers and sailing vessels, their regulation lights and fog and sound signals. He must be able to describe the signals of distress, and the signals to be made by ships wanting a pilot, and the liabilities and penalties incurred by the misuse of these signals; also the use and management of the rocket apparatus in the event of his vessel being stranded. He must be able to mark and use the lead and log lines, to moor and unmoor a vessel. He must also understand the construction, use and action of the bulkhead sluices, the engine-room telegraph, and be able to answer any other questions of a like nature appertaining to the duties of the mate of a coast tradeship, which the examiner may think proper to put to him.

Master of a Coast Trade Ship Over 300 Tons Gross Register.

(8) Candidates must be not less than 23 years of age and have served five years at sea, of which one year must have been as first or only mate in coast trade or second mate in foreign trade, during which service he must have been in possession of a mate's certificate for coast trade ships or of a second mate's certificate for foreign-going ships.

(9) He must pass the examination in colours, also the Board of Trade sight tests.

(10) In navigation and other subjects appertaining thereto, in addition to the qualifications required of a mate of a coast trade ship, a master will be required to find the current in the day's work when the position by observation is given; to compute the true course, and distance from one given position to another by Mercator's method, and also to determine the compass course, the deviation and variation being given; to find the true bearing of any heavenly body by means of azimuth, or amplitude or A.B.C. table; and from a compass bearing to determine compass error; to find the magnetic bearing of a distant object by swinging on equi-distant compass points; to compute a deviation table; to find latitude by meridian altitude of sun or star; to find longitude by chronometer from altitude of sun or star.

(11) In seamanship, in addition to the qualifications required of a mate of a coast trade ship, a master must understand how to rig a sea anchor, and what means to apply to keep a vessel with machinery disabled out of the trough of the sea, how to get a cast of the lead in heavy weather. He will be examined as to his resources for the preservation of the crew and passengers in the event of wreck, and the steps to be taken if his vessel is disabled and drifting towards a lee shore, and will be required to answer any other questions appertaining to the management of a coast trade vessel which the examiner may think necessary to put to him.

Mate of a Coast Trade Ship Under 300 Tons Gross Register.

(12) Candidates must not be less than 19 years of age and have served three years at sea.

(13) He must pass the examination in colours, also the Board of Trade sight tests and show to the satisfaction of the examiner that he is able to read and write English and to spell correctly, and to work sums in addition, subtraction, multiplication and division, involving the use of the tables of money, length, avoirdupois and time.

(14) In navigation, he will be required to find a chart or plan the course or courses to steer and the distance on each course from one given position to another; to find the ship's position, together with the set and drift (if any) on a chart or plan from cross bearings of two objects; to find the ship's position from two bearings of the same object, the course and distance run between taking the bearing being given, making due allowance for a given tide or current; also the distance of the ship from the object or any given position at the time of taking the second bearing; to find the time of high water at a given place by the aid of tide tables, and give a method of finding approximately the time of high water at any given place without the aid of tide tables.

(15) He must possess a thorough knowledge of the rule of the road as regards both steamers and sailing vessels, their regulation lights and fog and sound signals, and must also have a fair working knowledge and pass an oral examination in the International Code of Signals, Morse Code and Semaphore, and the markings, signs and abbreviations on Admiralty charts or plans; the use and adjustments of the sextant, the use and care of barometers, thermometers, hydrometers, and chronometers, and also in keeping a ship's log.

Master of a Coast Trade Ship Under 300 Tons Gross Register.

(16) Candidates shall be required to possess the qualifications of a mate of a coast trade ship over 300 tons gross register.

Master of a Harbour and River Ship.

(17) Candidates must be not less than 21 years of age and must have had at least three years' experience—

- (a) in a harbour and river ship in the capacity of deck hand;
- (b) in a certificated motor boat in the capacity of coxswain; or
- (c) at sea as deck boy, ordinary or able seaman.

(18) Candidates will be required to read and write a legible hand and to pass an examination in—

- (1) the rule of the road;
- (2) the management of harbour and river ships;
- (3) local knowledge of the port applied for;
- (4) the compass;
- (5) sight tests as prescribed for the Mercantile Marine;
- (6) Semaphore, Elementary Morse, International Code.

Coxswain of a Harbour and River Ship.

(19) Candidates must be not less than 19 years of age and must have had at least one years' experience in a motor launch or sailing vessel.

(20) Candidates will be required to pass an examination in—

- (a) the rule of the road;
- (b) the management of harbour and river ships;
- (c) local knowledge of the area applied for;
- (d) sight test as prescribed for the Mercantile Marine.

Third Class Engineer (Steam).

(21) Candidates must be not less than 21 years of age and must have served at least two years afloat as a fireman, or in any other higher capacity in the engine room or stokehold, or have served no less than one year afloat as a fireman, or in any other higher capacity in the engine room or stokehold and not less than one year in a workshop in the making or repairing of engines or boilers.

(22) He must be able to explain the use and position of the principal parts of condensing and non-condensing, simple, compound and triple expansion engines, and also the different kinds and arrangements of boilers and their mountings so used, including all valves, cocks, gauges, and connections in general use. He must understand the use of the salinometer, know how low-pressure boilers can be worked with sea-water, and how far the use of it is permissible in high pressure boilers; must know the cause and effect of incrustation, and greasy deposits on boiler heating surfaces, and how to prevent the same; must understand the water gauge, steam gauge, slide valve, link motion, and loose eccentric, the principle and construction of feed pumps and the common pumps about an engine; must know what defects may appear in any part of the machinery, and how such defects are prevented and remedied. He must be able to give a practical explanation of what ought to be done in the event of anything going wrong, and in ordinary circumstances must be able to do it.

(23) He must be able to write legibly and understand the first four rules (simple and compound) of arithmetic. He must also understand vulgar and decimal fractions, and be able to calculate the capacity of bunkers and rectangular and cylindrical tanks.

(24) The examiner may, with the approval of the manager, reject the application of any candidate whose qualifying service has been performed in small vessels or vessels plying on inland water.

Third-class Engineer (Motor).

(25) Candidates must not be less than 21 years of age and must have served at least two years afloat as a greaser, or in any other higher capacity in the engineroom, or have served not less than one year afloat as a greaser, or in any other higher capacity in the engine room, and not less than one year in a workshop in the making or repairing of engines.

(26) He must be able to explain the principles underlying the working of internal combustion engines, the differences between various types, starting and reversing arrangements, means of cooling the cylinders and pistons and the constructional details of apparatus for carburetting or atomising the fuel and also the different kinds and arrangements of pumps and coolers so used; including all valves, cocks, gauges, and connections in general use. He must understand the use and principles involved in the action of the pressure gauge, voltmeter, ammeter, thermometer, pyrometer, hydrometer and other meters commonly used by engineers on board ship. Constructional arrangements, details and working of steering engines and gears. The layout and working of electric light and power circuits, the care and maintenance of accumulators. Precautions against fire or explosion due to oil or gas, explosive properties of gas or vapour given off by fuel or lubricating oils when mixed with a quantity of air. The danger of leakage from oil tanks, pipes, etc., particularly in bilges and other unventilated spaces. The action of wire gauze diaphragms, fire detection, methods of dealing with fire, action and maintenance of mechanical and chemical fire extinguishers; must know what defects may appear in any part of the machinery, and how such defects are prevented and remedied. He must be able to give a practical explanation of what ought to be done in the event of anything going wrong, and in ordinary circumstances must be able to do it.

(27) He must be able to write legibly, and understand the first four rules (simple and compound) of arithmetic. He must also understand vulgar and decimal fractions, and be able to calculate the capacity of bunkers and rectangular and cylindrical tanks.

(28) The examiner may, with the approval of the manager, reject the application of any candidate, whose qualifying service has been performed in small vessels or vessels plying on inland water.

#### Marine Motor Engine-driver.

(29) Candidates must be not less than 21 years of age and must have had practical experience afloat or ashore in the management and care of oil engines for a total period of six months, two months of which must be service afloat.

(30) He must show that he possesses a fair knowledge of marine oil engines, their fittings, and the use of each and must be able to explain to the satisfaction of the examiner how a temporary repair should be executed in the event of a derangement of any part of the machinery.

#### Marine Surveyors.

(31) Certificates of competency as Marine Surveyors will be issued to those persons who have passed the examination necessary for an extra first-class engineer's certificate, as issued or recognised by the Board of Trade.

(32) Or to Master Mariners who have been in command for not less than five years since they obtained a foreign-going certificate as master issued or recognised by the Board of Trade, or who are in possession of an extra master's certificate.

(33) Fees in accordance with the following scale shall be charged for the foregoing certificates—

	£	s.	d.
Master of a Coast Trade Ship over 300 tons	2	10	0
Master of a Coast Trade Ship under 300 tons	2	0	0
Mate of a Coast Trade Ship over 300 tons	2	0	0
Mate of a Coast Trade Ship under 300 tons	1	10	0
Master of a Harbour and River Ship	1	10	0
Coxswain of a Harbour and River Ship		15	0
Third-class Engineer (Steam)	1	10	0
Third-class Engineer (Motor)	1	10	0
Marine Motor Engine-driver	1	0	0
Marine Surveyors	3	3	0
Copies of any of the above certificates		5	0

Provided that if a candidate is examined for Third-class Engineer steam and motor at the one examination the fee shall be £2.