Tuvalu

LAGOON SHIPPING REGULATIONS

2008 Revised Edition

CAP. 48.12.1

Tuvalu

LAGOON SHIPPING REGULATIONS

Arrangement of Regulations

Regulation

Supporting Documents

Tuvalu

LAGOON SHIPPING REGULATIONS

MADE UNDER SECTION 20 OF THE LAGOON SHIPPING ACT[1]

PART I - GENERAL

1 Citation

These Regulations may be cited as the Lagoon Shipping Regulations.

1A Application

After the commencement of the Merchant Shipping Act[2], these Regulations shall have effect only in so far as they apply in relation to, for the purposes of, or in connection with, lagoon service vessels.

2 Classes of vessels

For the purpose of these Regulations every vessel shall be assigned to a class shown in Schedule A and shall comply with all the regulations for a vessel of her class.

3 Records to be maintained

For the purposes of these Regulations the licensing officers shall maintain records showing the numbers of all certificates of competency and certificates of seaworthiness issued under these Regulations, and containing the names of persons to whom and the vessels in respect of which such certificates are issued.

4 Definitions

For the purpose of these Regulations unless the context otherwise requires —

"**deadweight**" shall mean the weight of cargo, fuel, water, stores, etc. carried in a vessel;

"**engineer (Motor-150)**" means a person holding a certificate of competency as engineer in charge of diesel or petrol engines of 150 brake horse power or under;

"**engineer (Motor-300)**" means a person holding a certificate of competency as the engineer in charge of diesel or petrol main engines or engine over 150 brake horse power;

"**engineer (Steam-300)**" means a person holding a certificate of competency as engineer in charge of steam main engines or engines over 150 brake horse power and up to and including 300 brake horse power;

"**engineer (Motor-unlimited)**" means a person holding a certificate of competency as the engineer in charge of diesel or petrol main engines or engine over 300 brake horse power;

"**engineer (Steam-unlimited)**" means a person holding a certificate of competency as the engineer in charge of steam main engines or engine over 300 brake horse power;

"**lagoon coxswain**" means a person holding a certificate of competency as the principal in charge of a lagoon service vessel;

"**lagoon engineer**" means a person holding a certificate of competency as engineer in charge of the engine of a lagoon service vessel;

"**length**" "**breadth**" "**depth**", etc., means the length, breadth, depth, etc., ascertained on the survey of the vessel for the granting of a certificate of seaworthiness;

"**passenger**" means a person other than the master or crew, that is to say a person of 12 years or upwards, and 2 persons between the ages of 2 and 12 years shall be treated as 1 person;

"**seaman**" means any person employed in any capacity as a member of the crew of any vessel;

"**tons**" means net tons.

PART II - CERTIFICATE OF COMPETENCY

5 Certificates of competency: Application for examination

A candidate for examination for a certificate of competency under section 6 shall make application in the prescribed form, which together with the candidate's sight test certificate and service certificates in the prescribed forms and the prescribed forms and the prescribed fee, shall be lodged with the licensing officer at least 2

weeks before the examination. The forms and certificates prescribed by this regulation shall be as shown in Schedule I. The fee shall be as shown in Schedule H.

6 Certificates of competency: minimum age and service

A candidate for examination for a certificate of competency must prove that he has attained the age and has served the minimum period of service required for each grade of certificate as shown in Schedule B, and that his conduct has been satisfactory:

Provided that the licensing officer may at his discretion exempt from compliance with this regulation any candidate who can produce satisfactory evidence of equivalent experience.

7 Definition of sea service

For the purpose of these Regulations, except where otherwise stated —

The terms "**sea service**" and "**service at sea**" shall be taken to mean service in the deck department, and to include time spent in port, provided that the candidate was a bona fide member of the crew of a vessel of the class required by these Regulations. In the case of an apprentice the whole of the period of apprenticeship shall count as sea service, provided that he has performed his service faithfully and has spent not more than one-fourth of his apprenticeship ashore; the term "engineering sea service" shall mean service as a bona fide member of the engine room staff of a vessel with motor main engines.

8 Equivalent certificates of competency

For the purposes of section 9 and these Regulations —

(a) a certificate of competency as mate of a foreign-going vessel issued in the United Kingdom shall be considered equivalent to a certificate of competency as master of a foreign-going vessel issued in pursuance of section 6, and a certificate of competency as second mate of a foreign-going vessel issued in the United Kingdom shall be considered equivalent to a certificate of competency as mate of a foreign-going vessel in pursuance of section 6. In respect of certificates of competency issued in pursuance of section 6 the order of superiority shall be as follows —

(i) Master of a foreign-going vessel;

(ii) Mate of a foreign-going vessel;

(iii) Master of an inter-island vessel;

(iv) Second Mate of a foreign-going vessel;

(v) Mate of an inter-island vessel;

(vi) Lagoon coxswain.

(b) A certificate of competency as engineer, second class motor, or steam and motor, issued in the United Kingdom shall be considered superior to a certificate of competency as engineer (motor or steam-unlimited) issued in pursuance of section 6.

(c) The standard of a certificate of competency as a master, mate or engineer issued by an authority outside the United Kingdom shall be as decided by the Minister from time to time.

9 Steam and motor endorsements

The certificates of competency for an engineer under section 6 (g) and (h) will be in the form of certificates for steam powered vessels or certificates for motor powered vessels. The holder of either a steam or motor certificate will on completion of the necessary engineering sea service as set out in Schedule B to these Regulations, and on passing the examination as set out in Schedule D to these Regulations, be granted either a motor or steam endorsement to such certificate. Such endorsement will entitle the holder to take charge of steam or motor engines of appropriate horse power as set out in his main certificate and endorsement.

10 Rules for the conduct of examinations

Examinations for certificates of competency shall be conducted in accordance with the rules for the conduct of examinations contained in Schedule C.

11 Language in which examination is to be conducted

Examination of candidates for certificates of competency shall be conducted in English, with the exception of those for lagoon coxswain and lagoon engineer, which may be conducted in Tuvaluan.

12 Syllabuses of examinations

Every candidate for examination for certificate of competency may be asked questions to determine his knowledge of the various subjects in accordance with the syllabuses of the various examinations set out in Schedule D to these Regulations.

13 Syllabus for higher grades

The syllabus for a higher grade of examination in both written and oral work is always to be regarded as including that syllabus of the subject for certificates of lower grades.

14 Issue of certificates of competency

The licensing officer shall issue to every candidate who has passed the examination a certificate of competency in the form prescribed as shown in Schedule I, provided that a candidate who already holds a certificate of a lower grade must surrender such certificate to the licensing officer before he may be issued with the certificate of the higher grade.

15 Lost certificate

Every person who has lost his certificate of competency must report the loss without delay to the licensing officer, who shall, on payment of the prescribed fee issue a certified copy of the certificate.

16 Fraud and misrepresentation

Any person who makes, or assists in making, or procures to be made any false representation for the purpose of procuring either for himself or for any other person, a certificate of competency, shall be guilty of an offence.

17 Attempted bribery

Any candidate who offers a gratuity to any inspector or to the licensing officer shall be guilty of an offence.

PART III CERTIFICATES OF SEAWORTHYNESS

18 Certificates of seaworthiness: Application for survey

The owner of any vessel requiring a certificate of seaworthiness under section 14 shall make application on the prescribed form, which together with the prescribed fee, must be lodged with the licensing officer not less than 1 month prior to the date on which the said certificate of seaworthiness is to become effective. The form required by this regulation shall be as shown in Schedule I. The fee required by this regulation shall be as shown in Schedule H.

19 Appointment of inspectors

The licensing officer shall, on receipt of the form of application and the prescribed fee, or in pursuance of section 18, appoint a suitable board of inspectors as required by rule 1 in Schedule E to survey the vessel and the equipment and machinery thereof.

20 Survey of vessels

Every inspector appointed under regulation 19, shall survey the vessel in accordance with the rules for the survey of vessels as laid down in Schedule E and shall report to the licensing officer on the state of seaworthiness of the vessel.

21 Necessary repairs to be completed

The licensing officer shall, on receipt of information from an inspector that alteration or repairs are necessary or that additional equipment is required, inform the master or owner accordingly, and no certificate of seaworthiness shall be issued until all such repairs or alterations have been completed or additional equipment supplied, to the satisfaction of the inspector.

22 Beaching or slipping of vessels

The licensing officer shall have the power to order any vessel for which a certificate of seaworthiness is required to be beached or slipped for the purpose of examining the underwater portion of the hull and the fittings thereof, and every such vessel must be beached or slipped at intervals not exceeding 15 months. Where a vessel has not been examined by an inspector at the time of slipping satisfactory evidence as to the condition of the underwater portion of the hull and fittings thereof must be furnished to the licensing officer when application for a certificate of seaworthiness is made and attached to the said application.

23 Charges for work done

All charges for work done or equipment supplied to a vessel to meet the requirements of these Regulations shall be borne by the owner of such a vessel.

24 Issue of certificates

The licensing officer shall, in pursuance of section 13, issue to every vessel which has been found seaworthy in accordance with regulation 20, a certificate of seaworthiness in the form prescribed as shown in Schedule I:

Provided that where the licensing officer is satisfied by the production of a seaworthiness certificate issued by an authority which he considers to be competent or where he is satisfied by reason of the newness of the vessel that it is seaworthy he may grant a certificate of seaworthiness notwithstanding that the provisions of regulations 19 and 20 have not been followed.

25 Marking of vessels

Every vessel of Class C and Class D in respect of which a certificate of seaworthiness is to be issued must have its name painted on both bows and the name

and port of registry painted across the stern in easily legible letters not less than 4 inches in depth.

26 Minimum number of seamen

The licensing officer shall prescribe for every vessel requiring a certificate of seaworthiness, the minimum number of the crew which must be carried on board, in accordance with the rules contained in Schedule G, and the number so prescribed shall be shown on the vessel's certificate of seaworthiness, and the master or owner of any vessel which proceeds to sea without the prescribed number of crew on board shall be guilty of an offence.

27 Maximum number of deck passengers

The licensing officer shall prescribe for every vessel requiring a certificate of seaworthiness, the maximum number of deck passengers which may be carried on board, in accordance with the rules contained in Schedule G, and the number so prescribed shall be shown on the vessel's certificate of seaworthiness and painted in not less than 2 inch letters on the vessel in a clearly visible position decided by the licensing officer:

Provided that in the special circumstances of a voyage wholly during daylight hours in continuous sight of land, in good weather, the master or owner may apply to the licensing officer for special permission to carry a greater number of deck passengers than that prescribed, and the licensing officer may at his discretion give permission. which shall be valid for 1 voyage only, for a number of deck passengers up to 50 per cent greater than that prescribed to be carried: such permission may be applied for, and given, by radio.

28 Maximum number of persons

The licensing officer shall prescribe for every vessel requiring a certificate of seaworthiness, the maximum number of persons including passengers and crew which may be carried on board in accordance with the rules contained in Schedule G, and the number so prescribed shall be shown on the vessel's certificate of seaworthiness, and the master or owner of any vessel which proceeds to sea with a greater number of persons than prescribed by this regulation shall be guilty of an offence.

29 Maximum quantity of cargo, etc.

The licensing officer shall prescribe for every vessel requiring a certificate of seaworthiness, the maximum deadweight which may be carried on board, including the maximum amount of cargo which may be carried on deck, in accordance with the rules contained in Schedule F. The deadweight so prescribed shall be shown on

the vessel's certificate of seaworthiness, and the master or owner of any vessel which proceeds to sea with a greater deadweight than prescribed by this regulation shall be guilty of an offence.

30 Load line

Every vessel for which a maximum deadweight exceeding 5 tons has been prescribed shall have carved on each side of the hull a deck line and a load line corresponding to such prescribed deadweight and in a position, and of shape and size determined by the rules contained in Schedule F. The assigned freeboard corresponding to the load line so determined shall be the minimum permitted freeboard as shown on the vessel's certificate of seaworthiness, and any person who alters the position of any load line or deck line without the authority of the licensing officer shall be guilty of an offence.

31 False representation

Any person who makes or assists in making or procures to be made any false representation or offers a gratuity to any inspector or to a licensing officer for the purpose of procuring for any vessel a certificate of seaworthiness shall be guilty of an offence.

PART IV - MISCELLANEOUS

32 Light, signals and sailing rules

Every vessel shall comply with all the provisions of the International Regulations for Preventing Collision at Sea in regard to the lights to be shown, the signals to be given and the sailing rules to be observed.

33 Enquiries

The licensing officer shall have the power to enquire into the nature or causes of any accident or damage which any vessel has sustained or caused or is alleged to have sustained or caused, in order to make recommendations to the Minister as to whether a formal inquiry should be held.

34 Exemptions

The licensing officer may exempt, subject to such conditions as he thinks fit to impose, any vessel, for the period of any voyage, or voyages, from compliance with any requirement of these Regulations if he is satisfied that the requirement is either impracticable or unreasonable having regard to all circumstances of the case.

35 Dangerous cargoes

Inflammable spirits, having a flash point below 73°F (22.8°C), such as petrol and aviation spirit shall not be carried below decks unless the vessel is fitted with special fire fighting equipment to the satisfaction of the licensing officer. Such spirits may be carried on deck when no deck passengers are carried or when it is in such quantity and containers as may easily be jettisoned. Smoking and the use of naked lights in its vicinity shall be prohibited, and notices to that effect prominently displayed near the place of stowage.

36 Licence fees for vessels registered outside Tuvalu

Every foreign-going vessel registered outside Tuvalu and engaged in trade or passenger traffic within Tuvalu shall pay a fee specified in Schedule H and receive a licence as prescribed in Schedule I. Such fee must be paid to a customs officer before clearance outward may be granted.

SCHEDULE A

CLASSIFICATION OF VESSELS UNDER REGULATION 2

1. Every vessel shall be assigned a class in accordance with the following table —

Class A	Sailing or paddling canoes of native design and construction engaged in inter-island trade or passenger traffic.
Class B.I	Lagoon service vessels under 20 feet in length.
Class B.II	Lagoon service vessels of 20 feet or over but under 50 feet in length.
Class B.III	Lagoon service vessels of 50 feet or over in length.
Class C.I	Inter-island vessels under 50 tons, other than vessels of Class A.
Class C.II	Inter-island vessels of 50 tons or over up to and including 120 tons.
Class C.III	Inter -island vessels over 120 tons.
Class D.I	Foreign-going vessels under 120 tons.
Class D.II	Foreign-going vessels of 120 tons or over but less than 500 tons.
Class D.III	Foreign-going vessels of 500 tons and upwards.

SCHEDULE B

RULES FOR DETERMINING THE MINIMUM AGES AND PERIODS OF SERVICE REQUIRED OF CANDIDATES FOR CERTIFICATES OF COMPETENCY AS PRESCRIBED BY REGULATION 6.

Lagoon coxswain

(i) A candidate for a certificate of competency as a lagoon coxswain must have attained the age of 18 years.

Mate, inter-island

(ii) A candidate for a certificate of competency as mate of an inter-island vessel must have attained the age of 20 years and must have served at least 3 years at

sea. This period of service must include at least 1 year on a foreign going vessel.

Master, inter-island

(iii) A candidate for a certificate of competency as master of an inter-island vessel must have attained the age of 22 years, must hold a certificate of competency as mate of an inter-island vessel or second mate of a foreign-going vessel and since obtaining it must have served at least 1½ years in a capacity not lower than mate on an inter-island vessel.

Second Mate, foreign-going

(iv) A candidate for a certificate of competency as second mate of a foreign-going vessel must have attained the age of 20 years and must have served at least 4 years on foreign-going or inter-island vessels, including at least 1 year on a foreign-going vessel.

Mate, foreign-going

(v) A candidate for a certificate of competency as mate of a foreign-going vessel must have attained the age of 22 years, hold a certificate of competency as second mate of a foreign-going vessel and since obtaining it must have served either (a) at least 1½ years as second mate of a foreign-going vessel, or (b) at least 2 years as mate on an inter-island vessel.

Master, foreign-going

(vi) A candidate for a certificate of competency as master of a foreign-going vessel must have attained the age of 25 years, hold a certificate of competency as mate of a foreign-going vessel and since obtaining it must have served either (a) at least 1½ years as mate of a foreign-going vessel, or (b) at least 2½ years in a capacity not lower than second mate of a foreign-going vessel, or (c) at least 2 years in a capacity not lower than master of an inter-island vessel.

Lagoon engineer

(vii) A candidate for a certificate of competency as a lagoon engineer must have attained the age of 18 years.

Engineer (motor-150)

(viii) A candidate for a certificate of competency as an engineer (motor-150) must have attained the age of 21 years and must have served at least 4 years on regular watch in the engine-room of a vessel of Class C or D, provided that this period of service may be reduced by up to 2 years for an equivalent period spent in engineering service in a workshop ashore.

Engineer (motor-300)

(ix) A candidate for a certificate of competency as an engineer (motor-300) must hold a certificate of competency as an engineer (motor-150) and since obtaining it must have served in vessels of Class C or D either (a) at least 1½ years as engineer in charge, or (b) at least 2 years as junior engineer.

Engineer (steam-300)

(x) A candidate for a certificate of competency as an engineer (steam-300) must have the same qualifications as required for a certificate of competency as an engineer (motor-300), but with service for the requisite period since obtaining engineer (motor-150) in vessels with steam main engines.

Engineer (motor-unlimited)

(xi) A candidate for a certificate of competency as an engineer (motor unlimited) must hold a certificate of competency as engineer (motor-300) and since obtaining it must have served in vessels of Class C or D either (a) at least 1 year as engineer in charge or (b) at least 1½ years as junior engineer

Engineer (steam-unlimited)

(xii) A candidate for a certificate of competency as an engineer (steam unlimited) must hold a certificate of competency as engineer (steam-300) and since obtaining it must have served in vessels of Class C or D with steam main engines either (a) at least 1 year as engineer in charge, or (b) at least 1½ years as junior engineer.

Steam or motor endorsements

(xiii) A person holding a certificate of competency as engineer (motor-300) or engineer (motor-unlimited) may qualify to be examined for a steam endorsement by serving at least 1 year in the engine room of a vessel of Class C or D fitted with steam main engines, and a person holding a certificate of competency as engineer (steam-300) or engineer (steam-unlimited) may

qualify to be examined for motor endorsement by serving at least 1 year in the engine room of a motor vessel of Class C or D.

SCHEDULE C

RULES FOR THE CONDUCT OF EXAMINATIONS FOR CERTIFICATES OF COMPETENCY AS PRESCRIBED BY REGULATION 10

1. No candidate shall be eligible for examination for a certificate of competency who has not completed the prescribed form of application and paid the prescribed fee.
2. The fee will not be refunded to a candidate who fails to pass the examination.
3. Every candidate will be deemed to have failed in the examination who —
   (a) fails to appear at the time and place appointed for the examination without good cause;
   (b) brings into the examination room any books or papers, other than tables approved by the inspector;
   (c) leaves the examination room without the permission of the inspector;
   (d) refers to any unauthorised book or paper, or copies from, or gives assistance to another candidate, or obtains assistance by any unauthorised means;
   (e) is guilty of disorderly or improper conduct in or near the examination room.
4. Examinations for certificates of competency shall be carried out by persons appointed by the licensing officer.
5. In marking written papers it will not be necessary to assign numerical marks or percentages. The board need only decide whether a paper has passed or failed.
6. In order to pass the examination it will be necessary for the candidate to achieve a pass in every part of the examination; provided that a pass in 2 or more parts of the examination will remain valid for a period of 6 months from the initial date of sitting for the examination, and if the candidate secures a pass in all other parts during this period he will be awarded a certificate of competency. If the candidate fails to secure a pass in all parts during this period he will be required to take the whole examination again. A candidate who has failed all parts of an examination will not be allowed to present himself for re-examination for a period of 6 months.
7. Candidates will be allowed to work out the various problems by any method to which they are accustomed, provided such method is correct in principle.

SCHEDULE D

SYLLABUSES OF EXAMINATIONS FOR CERTIFICATES OF COMPETENCY AS PRESCRIBED BY REGULATION 12

1. Where a syllabus is stated as being the same as that of a lower grade of certificate, the standard of questions asked and the standard required to be attained will be higher.

2. Syllabus of examination for a certificate of competency as lagoon coxswain —

Oral. —

Candidates must have knowledge of the steering and sailing rules (Part C of the International Regulations for Preventing Collisions at Sea), and of the topography of the area for which they are to be certificated including the position of dangerous reefs and obstructions, boat passages, landmarks, local weather and the set and drift of currents and tidal streams in the locality, and of the compass and boat handling.

3. Syllabus of examination for a certificate of competency as mate of an inter-island vessel —

Part 1.-Written. 3 hours.-Chartwork and navigation. —

Application of variation and deviation to true, magnetic and compass bearings and courses. Allowance for set and leeway. Taking and plotting compass cross bearings with a run between. Interpretation of information on Admiralty charts. Plane sailing. Use of Traverse table. Latitude by Meridianal altitude of the sun. Ascertaining the error of the compass by a bearing of the sun.

Part 2.-Written. 2 hours.-English. —

The paper will consist of an exercise in writing a letter or essay and will be designed to test the candidate's ability to write clear and grammatical English with due attention to spelling, legibility and neatness. It will be in no sense a test of technical knowledge.

Part 3.- Oral.- General ship knowledge. —

Names of the principal parts of a ship. General ideas on ship construction. Knowledge of steering gear, fire fighting and bilge pumping arrangements on candidate's last ship. Cause and prevention of corrosion. Care and maintenance of a vessel. Knowledge of rigging, cargo gear, life saving appliances, anchors and cables, etc. Duties of an officer of the watch. Use of azimuth mirror, compass, sextant and chronometer. Knowledge of the International Regulations for Preventing Collisions at Sea, Parts C and D. Marking and use of leadline. Morse code by flashing up to 6 words per minute,

4. Syllabus of examination for a certificate of competency as master of an inter-island vessel —

Part 1.-Written. 3 hours.- Chartwork and navigation. —

As for mate of an inter-island vessel with the addition of: Course and distance between 2 points. Finding the course to steer allowing for a current. Finding the time and height of high and low waters at a secondary port. Use of Admiralty Sailing Directions and of Notices to Mariners for correcting charts. Parallel and Mercator Sailings. Finding the position of the vessel by means of position lines obtained from sun, moon or stars out of the meridian, either simultaneously or with a run between observations. Recognition of stars of the first magnitude by reference to the principal constellations.

Part 2.-Written. 2 hours.-English.

As for mate of an inter-island vessel.

Part 3.-Written. 3 hours.-Mathematics and principles of navigation —

Algebra- addition, subtraction, multiplication, division, law of indices, insertion and removal of brackets, simple equations, problems.

Common logarithms-the practical use of logarithms to base 10, their use in simple calculations involving multiplication and division.

Mensuration-and its practical applications.

Geometry- construction and properties of plane triangles.

Trigonometry-Measurement of angles. Simple identities, solution of right-angled triangles.

Part 4.- Oral.- General ship knowledge. —

As for mate of an inter-island vessel with the addition of: A thorough knowledge of all parts of the International Regulations for Preventing Collisions at Sea. Strength of ropes and wire ropes. Knotting and splicing. Seizings and stoppers. Ship handling. Man overboard. Use of compass to ascertain risk of collision. Finding the index error of a sextant. Checking the chronometer error by WIT time signal. Use of fire appliances. Use of sea anchor.

Part 5.- Signals. —

Simple operation of R/T, Morse code by flashing or radio up to 6 words per minute. International code signalling. Knowledge of R/T distress procedure.

Part 6.-First Aid. —

First aid treatment of simple cuts, bruises, fractures, shock and poisoning. Resuscitation of the apparently drowned.

5. Syllabus of examination for a certificate of competency as second mate of a foreign-going vessel.

Part 1.-Written. 3 hours.- Chartwork and navigation. —

As for mate of an inter-island vessel with the addition of: Course and distance between two points. Use of Admiralty Sailing Directions. Finding the height and time of high and low waters at a standard port. Parallel and mercator sailing.

Part 2.-Written. 2 hours.-English. —

As for mate of an inter-island vessel.

Part 3.-Written. 3 hours.-Mathematics and principles of navigation. —

As for master of an inter-island vessel.

Part 4.- Oral.--General ship knowledge. —

As for mate of an inter-island vessel with the addition of: Stowage and dunnaging of cargo. Precautions against heavy weather. Principles of docking, undocking and mooring. Signal flag meanings of International Code Flags.

6. Syllabus of examination for a certificate of competency as mate of a foreign-going vessel. —

Part 1.-Written. 3 hours.- chartwork and navigation. —

As for master of an inter-island vessel and second mate of a foreign-going vessel with the addition of: Fixing the ship's position by horizontal and vertical angles. Use of the danger angle. Reduction to soundings.

Part 2.-Written. 2 hours.-English. —

As for mate of an inter-island vessel.

Part 3.-Written. 3 hours.-Mathematics and principles of navigation. —

As for master of an inter-island vessel with the addition of: *Algebra*-Graphs.

Logarithms-Calculations involving powers and roots. Geometry-Properties of circles, chords and tangents, diagrams of forces.

Trigonometry-Solution of oblique angled triangles, use of Traverse tables for solution of right angled triangles.

Navigation-Understanding of the terrestrial and celestial spheres.

Real and apparent movements of heavenly bodies. Time and G.H.A Correction of sextant altitudes. Geographical positions and position circles. Magnetic Meridian, variation and deviation. Simple properties of Mercator charts. Rhumb lines.

Part 4. (a)-Written. 2 hours.--General ship knowledge. —

As for the oral for master of an inter-island vessel and with the addition of: An acquaintance with the construction of wooden and small steel vessels including framing, beams, beam knees, hatchways, rudders,

steering gear, sounding pipes, air pipes, and pumping arrangements. The meanings of block, coefficient, displacement, and deadweight. Rigging for cargo work, protection of cargo, conversion of weight measurement of cargo into space measurement and vice versa. Ship maintenance.

(b)-Oral.-General ship knowledge. —

As for Part 4 (a) with the addition of: Handling of heavy weights, use and care of all deck appliances and fittings, anchors and cables. Ship handling in port approaches and bad weather.

Part 5.-Signals. —

As for master of an inter-island vessel.

Part 6.-First Aid. —

As for master of an inter-island vessel.

7. Syllabus of examination for a certificate of competency as master of a foreign-going vessel —

Part I.-Written. 3 hours.- Chartwork and navigation. —

As for mate of a foreign-going vessel with the addition of: Distance of sighting lights, distance from a point of land of known height.

Part 2.-Written. 2 hours.-English. —

As for mate of an inter-island vessel.

Part 3.-Written. 2 hours.-Mathematics and principles of navigation. —

As for mate of a foreign-going vessel with the addition of: The ideas of radio, proportion and variation. Solution of spherical triangles. Magnetism, law of attraction and repulsion, the Earth's magnetic field.

Part 4 (a)-Written. 3 hours.-General ship knowledge. —

As for mate of a foreign-going vessel with the addition of: Use of displacement and TP.I. scales. Effect of density of water on draught. Understanding of buoyancy, reserve buoyancy, centre of gravity, centre of buoyancy, Metacentric height, the effect of adding, moving weights, the effect of slack tanks, change of trim. Use of stability curves. Computation of areas by Simpson's rules. Elementary ideas on the use of cargo plans. Ideas on the construction and capacity of lifeboats. Maintenance of lifeboat equipment, lifebuoys, life jackets, line throwing apparatus, fire appliances, lights and sound signals. Organisation of crew. Inspection and maintenance of tanks, bilges, pipelines, strums, rudder, anchors and cables and steering gear. Drydocking routine. Scaling and painting. Cement boxes. Simple calculations of stresses in spans, derricks and running gear. Purchases and power gained. A knowledge of the relevant parts of the Factory Act. Stresses and strains in a seaway or due to loading or ballasting.

Ability to set out in a clear manner in a seaway or due to loading or ballasting. Ability to set out in a clear manner a report on damage sustained.

(b)-Oral.-General ship knowledge. —

As for mate of a foreign-going ship with the addition of: Pilot signals. Use of barometer, hydrometer. To correct a sextant into which has been introduced an error or errors of perpendicularity, side or index. Care of compasses. Action subsequent to collision, running aground, fire, etc. Preparations for dry-docking and un docking (or slipping). Prevention of fire at sea. Assisting a vessel in distress. Towage. Reliability of charts. Landfalls in thick and clear weather. Use of Notices to Mariners first weekly edition for the year. Ships business. Entering and clearing. Pratique, etc.

Part 5.-Written. 2 hours.-Meteorology. —

Principles and use of the barometer, thermometer and hygrometer. A knowledge of the main pressure, wind, and current systems of the world. Relationship between pressure and wind. Buys Ballots Law. The characteristics of anticyclones, depressions, monsoon systems, tropical revolving storms, land and sea breezes. Beaufort wind scale and weather notation. The principal cloud types. Simple ideas of fronts. General points to consider in the selection of ocean routes.

Part 6.-Signals. —

As for mate of a foreign-going vessel with the addition of: British semaphore up to 8 words per minute.

8. Syllabus of examination for a certificate of competency as lagoon engineer —

Oral. —

Candidates must have knowledge of the elementary theory of and the maintenance necessary on petrol and diesel marine engines of up to 50 brake horse power, including the cooling, lubricating, fuel, electrical and ignition systems and the stern gear. In a practical test he must show ability to effect simple emergency repairs on such an engine and equipment.

9. Syllabus of examination for a certificate of competency as an engineer (motor-150) —

Part 1.-Written. 3 hours.-Practical Mathematics.

Part 2.-Drawing. 3 hours.

Part 3.-Written. 3 hours.-Engineering knowledge.

Part 4.- Oral.- General engineering knowledge.

Scope of Examination

(a) The candidate should be able to write legibly and express himself in creditable English.

(b) The standard units necessary to deal successfully with simple problems relating to mechanical principles, safety valves, capacity of tanks, consumption of fuel and stores, speed of vessels, strength of pipes and air receivers subjected to internal pressure, stresses in shafting and other parts of the machinery; also the calculation of simple problems in electrical engineering, the relation between mechanical, electrical and thermal units; resistances.

(c) The construction of marine internal combustion engines in general use on board ships and the principles on which they work.

(d) The use and management of the various connections generally found in motor ships and to show by sketches and otherwise that the general arrangements are understood.

(e) The means of effecting ignition of the fuel or gases in the cylinders; methods of supplying air and fuel to the cylinders and the apparatus for atomising, carburetting, or vaporising the fuel in internal combustion cylinders.

(f) The construction and arrangement of magnetos, primary and secondary batteries and induction coils and their action.

(g) The cooling methods used for cooling marine engine cylinders and parts of internal combustion engines; the precautions to be taken against overheating and fracture of water cooled parts.

(h) The methods of controlling the engines, and how to repair defects due to wear and tear of the main and auxiliary machinery; to test the fairness of shafting and to effect repairs in the case of breakdown.

(i) The action of the various bilge, ballast, circulating and transfer pumps of force, bucket, gear, or centrifugal type, the general requirements concerning the bilge and ballast pumping arrangements and systems.

(j) The common metals and materials used by the seagoing engineer.

(k) The construction and action of the voltmeter, ammeter, pressure gauge, thermometer, barometer and hydrometer.

(l) Precautions to be taken against fire or the explosion of gases and how to deal with an outbreak of fire. The action of wire gauge diaphragms and the places in which such devices should be fitted.

(m) To be able to make a neat dimensioned sketch of any part of the machinery with which he ought to be familiar.

10. Syllabus of examination for a certificate of competency as engineer (steam/motor-300).

Part 1. -Written. 3 hours. -Practical mathematics.

Part 2.-Drawing. 3 hours.

Part 3.-Two written papers of 3 hours each.-Engineering knowledge.

Part 4.- Oral.- General engineering knowledge.

Scope of Examination

As for engineer (motor-ISO) with the addition of —

(i) For either steam or motor certificates —

(a) Practical mathematics sufficient to be able to work simple problems in mechanics, heat and hydrostatics; the use of logarithms, elementary trigonometry, mensuration, algebra and the metric system.

(b) The nature and properties of the fuel and lubricants used in steam and motor vessels.

(c) Welding and soldering.

(d) The calculation of horse power from indicator cards and the adjustment of the balance of power on each cylinder from indicator cards and from the different temperatures of the exhausts.

(e) The elementary principles of refrigeration; construction and operation of steering gears; maintenance of bilges and tanks.

(ii) For motor certificates only —

(a) The maintenance in good working condition and how to provide against breakdown any machinery to be found in a motor ship: also the carrying out of or the direction of any renewals or repairs.

(b) The different systems of lubrication met with on motor ships.

(iii) For steam certificates only —

(a) The construction and management of the types of marine steam engines and boilers now adopted; the function of each important part of the machinery.

(b) The use and management of marine boiler mountings and fittings; and the use of the ship's side valves usually fitted in way of the machinery spaces.

(c) The action of the slide valves; and the working of steam expansively.

(d) The working of steam auxiliary machinery used aboard ship; boiler-feed pumps, bilge, ballast, and circulating pumps, air pumps and compressors, steering engines and gears and electric motors and generators.

11. Syllabus of examination for a certificate of competency as engineer (steam/motor-unlimited) .

Part I.-Written. 3 hours.-Electrotechnology and elementary naval architecture.

Part 2.-Drawing. 3 hours.

Part 3.-Two written papers of 3 hours each. Engineering knowledge.

Part 4.- Oral.-General engineering knowledge.

Part 5.-Written. 3 hours.-Mathematics.

Scope of Examination

As for engineer (steam/motor-300) with the addition of:

(i) For either steam or motor certificates.

(a) The effect of an electric current--chemical, magnetic and heating. Primary cells and accumulators. Electrolysis. Simple magnetic and electromagnetic phenomena. Application of electromagnetic phenomena to the generator. Practical electrical units (limited to D.C. practice). Ohm's Law. Laws of resistance. Effects of temperature on resistance. Mechanical and heat equivalents. Modes of current distribution for lighting and power purposes.

(b) Shift of centre of gravity by adding, removing, shifting or consuming fuel, ballast or cargo. Relation between speed of vessel and fuel consumption. Action of propeller, slip, thrust and power. Simple problems on strength of structural members to resist liquid pressure.

(c) The drawing paper will consist of a test of the ability to apply the principles of projection and candidates will be asked to draw a plan, elevation or section or a combination of these views of a piece of machinery from information supplied.

(d) The general effects of the various treatments on the physical properties of materials commonly used in the construction of marine engines and boilers, and the mechanical tests to which these materials are normally subjected.

(e) Heat and combustion. The properties of steam, fuel, lubricants and other liquids, gases and vapours used in machinery on board ship.

(f) The causes, effects and usual remedies for incrustation and corrosion. Feed water and blow densities, and scale formation.

(g) Constructional details and working principles of marine engines; methods of determining their B.H.P. The principle of working and methods of calibration of dynamometers and torsion meters.

(h) The methods of dealing with wear and tear of machinery and boilers. The alignment of machinery parts, the correction of defects due to flaws in material or accident. Temporary or permanent repairs in the event of derangement or total breakdown.

(i) The constructional arrangement, details and working of steering-engines and gears, refrigerating machinery, hydraulic, and such steam and internal combustion engines as are used for emergency and auxiliary machinery on board ship.

(j) The lay-out and working of electric light and power circuits; single-wire, 2-wire, 3-wire and ring main systems. The purpose of the balancer. Types of insulation. Use of the megger. General principles and functions of essential instruments. General construction and operation of switch gear and safety devices employed in the electrical equipment. Ignition-battery and coil and H.T. magneto. The care and maintenance of accumulators. Constructional arrangement, operation and maintenance of electric steering gears. Constructional arrangements, operation, maintenance and general characteristic performance of A.C. generators and motors commonly installed on board ship. The synchronising and parallel running of alternators.

(k) Application of the indicator. Calculation of mean pressure and horse power. Fluctuation of pressure in the cylinder as shown by indicator diagrams. Precautions against fire or explosions due to oil or gas. Flash point. 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. gas producers, and vaporisers, particularly in bilges and other unventilated spaces. Fire detection. Methods of dealing with fire. Action and maintenance of mechanical fire and chemical fire extinguishers and other fire-fighting appliances, respirators and safety lamps.

(l) The usual structure of an ordinary steel ship. The preservation in good condition of bilges, tanks under boilers, and water-tight doors.

(m) The common terms used in the measurement of steel ships, for example, length between perpendiculars, breadth overall, moulded depth, draught and freeboard.

(ii) For motor certificates only —

(a) The principles underlying the working of internal combustion engines. The differences between various types of engines. Constructional details of internal combustion engines in general use.

(b) The nature and properties of the fuel and lubricating oils generally used in internal combustion engines. The supply of air and fuels to cylinders of engines of different type. The construction details of apparatus for carburetting or atomising the fuel. The means of cooling the cylinders and pistons. Constructional details and working of air compressors.

(c) The methods of constructing marine internal combustion engines. The processes to which the several parts are submitted or which are incidental to their manufacture, and the methods employed in fitting the machinery on board ship.

(d) Starting and reversing arrangements and the various operations connected therewith.

(e) The attention required for the operation and maintenance of the various parts of machinery. The use and management of valves, pipes, connections and safety devices employed.

(f) Enumeration and description of defects arising from working of machinery. The remedy for such defects.

(g) Constructional details and management of auxiliary steam boilers, their fittings and mountings. Constructional details and management of auxiliary machinery.

(iii) For steam certificates only —

(a) The methods of constructing marine steam engines and boilers, the processes to which the several parts are submitted, or which are incidental to their manufacture, and the methods employed in fitting the machinery on board ship.

(b) The various types of propelling and auxiliary steam engines now in use, the functions of each important part and the attention required by the different parts of the machinery on board ship.

(c) The methods of testing and altering the setting of the steam admission and exhaust valves, and the effect produced in the working of the engine by definite alterations in the settings of the valves.

(d) The constructional details and working of evaporators, feed water heaters and feed water filters.

(e) Marine boilers of various modern designs; the manner of staying them, and also the prevention of movement of boilers when vessels are pitching or rolling, the determination by calculation of suitable working pressure for boilers of given dimensions.

(f) The use and management of boiler fittings and mountings, with special reference to water gauges and safety valves. Precautions necessary when raising steam and operating stop valves, with particular reference to the danger arising from water hammer action.

(g) Constructional details, operation and maintenance of installations generally employed for assisting draught, superheating steam and burning coal or oil fuel.

12. Syllabuses of examinations for steam or motor endorsements —

(i) For steam or motor endorsement to a certificate of competency as engineer(steam/motor-300), a 3 hour written paper and an oral examination on paragraph 10 (ii) or (iii) of this schedule.

(ii) For steam or motor endorsement to a certificate of competency as engineer (steam/motor-unlimited), a 3 hour written paper and an oral examination on paragraph 11 (ii) or (iii) of this schedule.

SCHEDULE E

RULES FOR THE SURVEY OF VESSELS FOR CERTIFICATES OF SEAWORTHINESS IN PURSUANCE OF REGULATION 20

Board of inspectors

1. The board of inspectors appointed by the licensing officer to survey a vessel for a certificate of seaworthiness shall normally comprise officers with minimum qualifications as under —

   (a) For vessels of Class A, an administrative officer or qualified deck officer, having a knowledge of native craft.

   (b) For vessels of Class B I, an administrative officer or a shipwright or a qualified deck officer and in the case of vessels with engines, an engineer (motor-I50).

   (c) For vessels of Class B II and B III, a person holding a certificate of competency as master foreign-going G.E.I.C., and in the case of vessels with engines, an engineer (motor-I 50).

   (d) For vessels of Class C and D, a person holding a certificate of competency as master foreign-going D.T.I. who will be assisted by a shipwright in the case of wooden vessels, and by a wireless officer in respect of the radio equipment, and in the case of vessels with engines, an engineer (motor or steam-unlimited).

Certificates of lower class may be awarded

2. Every vessel, which fails to comply with the requirements of these Rules for a vessel of the class for which application is made, may be awarded a certificate of seaworthiness for a vessel of lower class, provided that she complies with the requirements of that class.

Vessel to be seaworthy

3. Every inspector must, before informing the licensing officer that any vessel is seaworthy, be satisfied that such vessel is staunch, safe, sound and seaworthy in every respect and complies with all the requirements of these Rules for a vessel of her class.

Underwater portion of hull to be inspected

4. Subject to the provisions of regulation 22, the inspector shall examine the underwater portion of the hull including the keel, rudder and rudder pin ties,

propeller brackets, water inlets and outlets. In the case of wooden vessels, the inspector may order the removal of fastening or a portion or portions of the sheathing in order to satisfy himself as to the condition of the hull.

Deck houses, etc.

5. The inspector shall examine the above water portion of the hull also the deck, deck houses and deck fixtures.

Fittings. etc.

6. The inspector shall examine the masts, rigging, hatches, tarpaulins, cargo gear, steering gear, deck and accommodation lighting, ventilation, ports and deadlights, and fittings.

Sails

7. Every vessel which is primarily or secondarily a sailing vessel shall be equipped with sails and cordage to the satisfaction of the inspector.

Freeing port area

8. Every vessel fitted with bulwarks more than 6 inches high shall have a minimum freeing port area of 1 square foot for every 5 feet of length of bulwarks.

Accommodation, etc.

9. Every vessel must have accommodation, sanitary arrangements and cooking facilities as follows —

(i) Vessels of Classes C and D shall have approved sleeping accommodation for every member of the crew required by regulation 26; at least 2 approved lavatories, 1 of which shall be reserved for the exclusive use of the officers and saloon passengers, and in the case of vessels certified to carry deck passengers under these Regulations, at least 1 approved lavatory for every 24 persons, other than officers and saloon passengers, which the vessel is certificated to carry, provided that vessels of Class C I need only have 1 approved lavatory; and approved galley.

(ii)

(a) Approved sleeping accommodation for officers and saloon passengers shall be adequately lighted and ventilated and shall contain at least 24 superficial feet and a bed or bunk for every person for which the space is approved, and every passenger for whom this standard of

accommodation is not available shall be counted as a deck passenger. Approved sleeping accommodation for crew, other than officers, shall be adequately lighted and ventilated and shall contain at least 15 superficial feet and a bed or bunk for every person for which the space is approved. Beds or bunks shall be at least 6 feet 3 inches long, at least 2 feet wide, and shall have at least 2 feet headroom and shall be raised at least 6 inches clear of the deck.

(b) An approved lavatory, other than a lavatory reserved for the exclusive use of officers and saloon passengers, may in the case of vessels of Class C consist of an outboard box, provided such box is of sound construction and adequately screened to the satisfaction of the inspector. An approved lavatory for the exclusive use of officers and saloon passengers on vessels of Class C II and C III and an approved lavatory on vessels of Class D shall consist of a water closet with an ample flush of water, adequately lighted and ventilated.

(c) An approved galley shall be adequately lighted and ventilated and shall contain facilities for providing adequate cooked meals for the number of persons which the vessel is certificated to carry, without risk of fire damage to the vessel.

(iii) The accommodation approved for the carriage of deck passengers under regulation 27 must be adequately shaded and sheltered. Where a deck within 4 feet of the waterline is included in the "clear deck space" under that regulation, a platform or floor raised at least 6 inches above the deck shall be provided.

Fresh water

10.

(i) Every vessel must have provision for carrying in approved tanks or receptacles, fresh water in accordance with the following table —

Vessels of Class	A minimum of
A	1 gallon
BI	1 gallon
BII	4 gallons
BIII	12 gallons
C	5 gallons for every person the vessel is certificated to carry.
D	10 gallons for every person the vessel is certificated to carry.

(ii) An approved tank or receptacle must be capable of keeping the contents free from contamination and the entry of sea water.

Emergency rations

11.

(i) Class C and D vessels must keep on board in approved containers emergency rations in the form of 2 pounds of biscuits and 1 pound of meat for every person that the vessel is certificated to carry, or an approved equivalent.

(ii) An approved container must be capable of protecting the contents from contamination or deterioration.

(iii) The prescribed emergency rations must be kept on board in good order at all times.

(iv) Nothing in this Rule shall relieve the master or owner of any vessel of the responsibility for providing food and water adequate for the voyage on which the vessel is engaged.

Anchors and cables

12. Every vessel shall be equipped with stock anchors, and with cables and mooring lines, in good order in accordance with the scale laid down. An inspector may at his discretion and except in the case of kedge anchors, permit the use of stockless anchors in the place of the stock anchors prescribed, provided that where stock less anchors are fitted they must be of a weight at least 25 per cent greater than that specified.

(a) Vessels of Class A, with at least 5 fathoms of line and an anchor or stone or weight.

(b) Vessels of Class B I, with at least 10 fathoms of 2 inch rope and an anchor weighing at least 10 pounds.

(c) Vessels of Class B II, with at least 10 fathoms of 3 inch rope, an anchor weighing at least 30 pounds and 10 fathoms of 3/8 inch diameter chain.

(d) Vessels of Class B III, with at least 20 fathoms of 31/2 inch rope, 2 anchors each weighing at least 30 pounds and 20 fathoms of 112 inch diameter chain.

(e)

(i) Vessels of Class C and D, with anchors and cables to the satisfaction of the inspector, provided that these are not less than Lloyds requirements, also rope to the following requirements —

Class of Vessel	Minimum size and length
CI	31/2 inch, 20 fathoms

CII	4 inch, 45 fathoms
CIII	5 inch, 90 fathoms
DI	4 inch, 60 fathoms
DII	5 inch, 90 fathoms
DIII	6 inch, 90 fathoms

(ii) Every vessel of Class C and D shall have the prescribed length of cable divided into 2 lengths which shall not differ more than 15 fathoms in length and each length shall be secured at one end to 1 of the bower anchors and the inboard end shall be properly secured on board.

(iii) The inspector shall satisfy himself that the arrangements for letting go and heaving in the anchors are adequate.

Lights

13.

(i) Every vessel shall be equipped with approved navigation lights as required by the International Regulations for Preventing Collisions at Sea.

(ii) An approved navigation light must be an oil burning lantern suitably screened and protected from wind and weather and placed to the satisfaction of the inspector.

Communications and signals

14.

(i) Every vessel shall be equipped with efficient communications and signalling equipment as shown below —

(a) Vessels of Classes C and D, with an approved radio installation, an approved morse signalling lamp, a set of International Code flags and volumes 1 and 2 of the International Code of Signals.

(b) Vessels of Class D, with a set of semaphore flags.

(ii) An approved radio installation shall consist of radio transmitting and receiving apparatus capable of transmitting and receiving messages by speech and morse on frequencies as laid down by the Telecommunications Officer, and having a transmitted power of not less than 10 watts; adequate batteries used for no other purpose than to supply power to the radio installation and capable of being charged when the main engines are stopped; and aerials, earthing and wiring arrangements to the satisfaction of the inspector.

(iii) An approved morse signalling lamp for vessels of Class D must be an Aldis or other efficient daylight signalling lamp.

Sound equipment

15.

(i) Every vessel of Classes C and D shall be equipped with an efficient bell.

(ii) Every vessel of Class C shall be equipped with an efficient foghorn, or whistle, or siren.

(iii) Every vessel of Class D shall be equipped with an efficient foghorn and whistle or siren.

Navigation equipment

16.

(i) Every vessel of Class B shall carry an efficient compass with suitable means of illumination.

(ii) Every vessel of Classes C and D shall carry —

(a) An efficient compass suitably placed with suitable means of illumination fitted with an azimuth mirror or other approved means of obtaining compass bearings.

(b) An efficient sextant.

(c) An efficient chronometer or approved deck watch.

(d) A set of drawing instruments, comprising at least parallel rules, compasses, dividers and protractor.

(e) A set of navigational tables comprising at least —

Nautical Almanac for the current year, and Nories, Burton's or other approved nautical tables.

(f) A set of corrected charts comprising at least —

Gilbert Islands	(No. 731)
Pacific Ocean N.W.	(No. 780)
Pacific Ocean S.W.	(No. 781).

Fire appliances

17.

(i) Every vessel shall be equipped with approved fire extinguishers as follows —

(a) Vessels of Class B I and II if fitted with an engine, with an approved Carbon Tetrachloride 1 quart fire extinguisher.

(b) Vessels of Class B III, with an approved 2 gallon portable fluid fire extinguisher, and, if fitted with an engine, an approved Carbon Tetrachloride 1 quart fire extinguisher or an approved 2 gallon portable foam fire extinguisher.

(c) Vessels of Class C I, II and D I with 2 approved 2 gallon portable fluid fire extinguishers, and if fitted with engines an approved Carbon Tetrachloride 1 quart fire extinguisher and 2 approved 2 gallon portable foam fire extinguishers.

(d) Vessels of Class C III and Class D II with 3 approved 2 gallon portable fluid fire extinguishers and, if fitted with engines, 2 approved Carbon Tetrachloride 1 quart fire extinguishers and 3 approved 2 gallon foam fire extinguishers.

(e) Vessels of Class D III with 4 approved 2 gallon portable fluid fire extinguishers, and if fitted with engines, 2 approved Carbon Tetrachloride 1 quart fire extinguishers, and 4 approved 2 gallon foam fire extinguishers, and 1 approved 10 gallon foam fire extinguisher.

(ii) Fire extinguishers shall be placed in positions approved by the inspector, and shall not be moved from such positions without the approval of the inspector except for fire drills or in actual emergency.

(iii) Every vessel shall carry approved fire buckets as follows —

(a) Vessels of Class B I, 1 such bucket or a bailer;

(b) Vessels of Class B II, 2 such buckets;

(c) Vessels of Class B III, 3 such buckets;

(d) Vessels of Class C and Class D, 1 such bucket for every 20 feet of the vessel's length, provided that not more than 6 such buckets need be carried.

(iv)

(a) Every vessel of Class C and Class D propelled by machinery shall be equipped with an approved mechanical fire pump, and in addition every vessel of Class C III and Class D II and III shall carry a portable mechanical fire pump.

(b) Every vessel of Class C and Class D, not provided with a mechanical fire pump as laid down in subsection (a) of this Rule, shall be equipped with an efficient manual fire pump capable of delivering an adequate jet of water to every part of the vessel.

(c) Every vessel, which is required by this Rule to be equipped with a fire pump, shall be equipped with sufficient piping, couplings, and hose to deliver a jet of water to every part of the vessel.

(d) An approved mechanical fire pump may be a sanitary, ballast, bilge, or general service pump, provided that it is capable of operating independently of the main engines and of delivering an adequate jet of water to every part of the vessel.

(v) Every vessel of Class C III and D II and III shall be equipped with an approved smoke helmet complete with lifeline, safety lamp and hatchet.

(vi) Every vessel of Class C and Class D shall be equipped with 2 approved hatchets which shall be placed in positions approved by the inspector, and shall not be moved from such positions without the approval of the inspector except for fire drills or in actual emergency.

(vii) The requirements laid down in paragraphs (i) to (vi) of this Rule are minimum requirements and an inspector may if he thinks fit direct that appliances in excess of those laid down shall be carried in order to ensure that every part of the vessel is adequately protected.

Pyrotechnics

18.

(i) Every vessel of Class C II and C III and Class D, other than vessels less than 60 feet in length, shall carry an approved line throwing apparatus.

(ii) Every vessel of Class B II and B III shall carry not less than 12 pyrotechnic distress signals which shall be either approved parachute signals or approved red hand flares.

(iii) Every vessel of Class C and Class D shall carry not less than 12 approved parachute signals and 2 approved buoyant smoke signals.

(iv)

(a) An approved line throwing apparatus must be capable of throwing a 1/2 inch line, of at least 250 lb. breaking strain, a distance of at least 200 yards in calm weather, and must include 4 lines and 4 rockets.

(b) An approved parachute signal must consist of a rocket which is capable of being projected to a height of not less than 750 feet and emitting a single bright red star which burns while falling, its rate of fall being controlled by means of a parachute.

(c) An approved red hand flare shall be capable of burning for 55 seconds and have a luminosity of not less than 10,000 c.p.

(d) An approved buoyant smoke signal must be capable of giving off a volume of orange coloured smoke.

(v) Every vessel which is required by these Rules to carry parachute signals must be fitted with brackets to permit of the signals being fired from either side of the vessel at an angle of between 10° and ISO from the perpendicular, and giving a clear line of flight.

(vi) All pyrotechnic distress signals and rockets shall be packed in a watertight container clearly marked and stowed in an approved position.

Life saving appliances

19. Every vessel shall be equipped with life saving appliances in accordance with the following requirements —

(i) Every vessel of Class A shall be equipped with at least 2 paddles, and a bailer.

(ii) Every vessel of Class B shall be equipped with 2 stout oars, bailer or bilge pump, and shall, unless fitted with approved buoyancy tanks, carry 1 approved life-jacket for every person that the vessel is certificated to carry and 1 approved life-buoy for every 20 feet of the vessel's length.

(iii) Every vessel of Class C and Class D shall carry 1 approved life-jacket for every person the vessel is certificated to carry plus 10 per cent of that number; 1 approved life-buoy for every 20 feet of the vessel's length, provided that no more than 10 life-buoys need be carried.

(iv) In every vessel required to carry 4 or more life-buoys, 1 such life-buoy shall be fitted with an approved light, and 1 with 15 fathoms of 1 1/2inch line. In every vessel required to carry 8 or more life-buoys, 2 such life-buoys shall be fitted with approved lights and 2 with 15 fathoms of 1 1/2 inch line.

(v) Every vessel of Class C and D shall carry approved buoyant apparatus sufficient to accommodate every person for which the vessel is certificated. Such buoyant apparatus shall consist of: Approved lifeboats or approved inflatable life-rafts capable of carrying at least 60 per cent of such persons and approved boats or approved life-rafts for the remainder.

(vi) Notwithstanding any of the provisions of rule 19 (v), every vessel of Class C and D shall carry 1 approved lifeboat in davits, and every vessel of 60 feet and over in length whose approved buoyant apparatus consists of lifeboats shall carry 2 such lifeboats in davits, 1 on either side of the vessel.

(vii) In every vessel or boat required to be fitted with approved buoyancy tanks, such tanks must be of. a total volume equal to at least one tenth of the cubic capacity of the boat, and where an engine is fitted, these tanks must be increased to compensate for the weight of such engine.

(viii)

(a) An approved buoyancy tank must be constructed of copper or yellow metal or other approved metal suitably protected against

movement or damage, and placed to the satisfaction of the inspector.

(b) An approved life-jacket shall mean a jacket or other appliance conforming to the United Kingdom Department of Trade specifications.

(c) An approved life-buoy shall be of solid cork or other approved material conforming to the Department of Trade specifications.

(d) An approved life-buoy light shall be of a type approved by the Department of Trade.

(e) An approved lifeboat shall, for the purpose of these Rules, mean a lifeboat of a standard not less than that required in the United Kingdom under the Merchant Shipping (Life Saving Appliances) Rules, and shall be provided with —

A full complement of oars and 2 spare oars and a steering oar;

1 1/2 sets of crutches attached to the boat by lanyards;

2 plugs for each plughole attached to the boat by lanyards;

A line becketed round the boat;

A mast with stays and sails;

An approved compass;

A sea anchor, oil bag and 1 gallon of wave oil;

A rudder and tiller;

A bailer;

A painter;

An approved first aid outfit in a waterproof case;

A lantern with sufficient oil to burn 8 hours;

At least 50 lifeboat matches in a watertight container;

2 hatchets.

(f) An approved boat, other than an approved lifeboat, shall include cargo boats, work boats and launches carried as part of the vessel's equipment provided that it complies with the following requirements —

(1) Is an open boat of wooden construction with rigid sides, fitted with approved internal buoyance tanks, properly constructed and of such form and proportions that it shall have ample stability in a seaway, and sufficient freeboard when fully loaded with its full complement of persons and equipment.

(2) That the number of persons that such boat shall be deemed fit to carry shall not exceed 1 person for each cubic foot of buoyance tank capacity that it contains, providing that

such number shall not be greater than one tenth of the cubic capacity of the boat. The space occupied by an engine and fuel tanks shall be deducted from the gross cubic capacity of the boat and adequate buoyance tank capacity shall be allowed to compensate for the weight of such engine.

(3) Carries the following equipment

If under 15 feet, 1 pair of oars;

If of 15 feet or over, 2 pairs of oars, a steering oar or rudder and tiller;

1 1/2 sets of crutches attached by lanyards;

A line becketed round the boat;

Sea anchor, oil bag and 1 gallon of wave oil;

A bailer;

A painter;

2 hatchets.

(g) An approved life-raft of non-inflatable type shall be deemed capable of supporting a number of persons equal to 1/3 of the capacity of the buoyancy tanks measured in cubic feet, or 1/4 of the deck area of the raft measured in square feet, whichever number is the smaller, and shall have, in the centre of the deck space, a stowage space for provisions capable of being opened from the top or the bottom of the raft.

(h) An approved life-raft of an inflatable type shall be of a type approved in the United Kingdom and shall be deemed capable of carrying the number of persons for which it is approved.

(i) An approved life-raft must be provided with 4 paddles.

(j) Every approved lifeboat, boat and raft shall be provided with the following minimum rations for every person that it is deemed fit to carry —

3 quarts of fresh water;

14 ozs. of biscuits;

14 ozs. of barley sugar;

14 ozs. of sweetened condensed milk;

all of which shall be packed in watertight containers clearly marked "lifeboat rations"; and the following equipment —

6 hand flares;

2 buoyant smoke signals;

1 jack knife fitted with a tin opener;

Approved fishing equipment.

(k) The equipment and rations required to be provided for approved buoyant apparatus must be stowed in, or adjacent to, the boat or raft for which they are intended and must, if not stowed in the boat, be capable of being transferred from their place of stowage into the boat by 1 man within a period of time approved by the inspector.

(I) When the licensing officer has satisfied himself that a buoyant apparatus complies with the foregoing requirements, he is to require it to be marked on the side or end exposed to the view of passengers, with the number of persons it is permitted to carry and date.

Compass adjustment

20. Every vessel of Class C and D, for which a certificate of seaworthiness is required, must be swung to ascertain and if necessary reduce the deviation of the compass, and a deviation card must be attached to the vessel's certificate of seaworthiness and a spare copy retained by the licensing officer. No adjustments may be made to compasses by persons not so authorised by the licensing officer.

Medical supplies

21. Every vessel of Class C and D shall be equipped with a medicine chest, clearly marked" First Aid", fitted in an accessible position, such medicine chest shall be stocked with the following; minimum requirements —

(i) For vessels of Class C —

Ship Captain's Medical Guide	1 copy
Medicine —	
Aspirin tablets (Gr. V)	100
Morphine Ampoules (Gr. 1/4)	6
Diarrhoea Mixture	16 oz.
Sulphadimidine tablets	50
Tincture of Iodine (Fort)	4 oz.
Aqueous Sol. Acriflavine	4 oz.
Castor Oil	8 oz.
Dressing, etc. —	

Lint	1 lb.
Cotton Wool	1 lb.
Gauze Bandages	1 doz.
Sterile tube containing suture silk on needles	3
or (Suture Needles)	3
(Suture Thread)	Q.S.
Scissors	1 pr.
Eye Spud	1

(ii) For vessels of Class D —

Ship Captain's Medical Guide	1 copy
Medicine —	
Aspirin tablets (Or. V)	100
Tablets of Codein Co.	100
Epsom Salts	8 oz.
Morphine Ampoules (Gr. 1/4)	12
Distaquaine Penicillin (in oily solution)	12 vials
Pot Permanganate Tablets	36
Avomine Tablets	50
Stomach Powder	1 lb.
Diarrhoea Mixture	32 oz.
Sulphadimidine Tablets	100
Sulphaguanidine Tablets	100
Tincture of Iodine	8 oz.
Aqueous Solution Acriflavine	8 oz.
Castor Oil	16 oz.
Dressing, etc. —	
Lint	2 lb.
Cotton Wool	2 lb.

Gauze Bandages	2 doz.
Sterile tube containing silk on needles	6
or (Suture Needles)	6
(Suture Thread)	Q.S.
Scissors	1 pr.
Dissecting Forceps (toothed)	1 pr.
Spencer Wells	2 prs.
Scalpel handle	1
Thermometers	2
Stomach Tube	1
Penicillin Tulle	3 tins
Hypo-Syringe	1
Hypo-Needles	6
Serum Needles (for Penicillin)	6
Eye Spud	1

Propelling machinery

22.

(i) An inspector shall have the power to order the engines of any vessel to be stripped for survey, and the engines of any vessel must be so stripped at intervals not exceeding 15 months. Inspections may take the form of running surveys, provided that adequate records of such surveys are kept on the vessel and certified by an inspector, or in the case of vessels undergoing overhaul outside Tuvalu, have been certified by other approved competent authority.

(ii) The main engines of every vessel, which is primarily or secondarily mechanically propelled, shall satisfy the inspector as to their serviceability, including all appropriate stern gear, shafting, gears, and other accessories necessary for the efficient and safe operation of the engines.

(iii) Every vessel which is primarily or secondarily mechanically propelled must have serviceable fuel pumps, pipelines and tanks capable of containing a minimum quantity of fuel according to the following table —

Vessel's Class	Tank capacity in running hours
B primarily mechanically propelled	6 hours
B secondarily mechanically propelled	4 hours
C primarily mechanically propelled	48 hours
C secondarily mechanically propelled	24 hours
D primarily mechanically propelled	144 hours
D secondarily mechanically propelled	96 hours

Nothing in this rule shall relieve the master of the responsibility of ensuring that sufficient fuel is carried for the purpose of any intended voyage, including an adequate reserve for emergency.

(iv) The starting gear for the main engines of any vessel primarily or secondarily mechanically propelled-other than those that may be started by hand-must —

(a) in the case of main engines which are started by compressed air, consist of a serviceable auxiliary air compressor and air bottles of sufficient capacity for at least 12 starts, if direct drive, or 6 starts if fitted with a clutch and reverse gear.

(b) in the case of main engines which are started by electricity, consist of for vessels of Class B, adequate batteries;

for vessels of Class C and Class D, adequate batteries and a serviceable auxiliary generating set.

(v) On vessels equipped with a compressor, the compressor, compressed air lines, bottles, gauges, and valves shall satisfy the inspector as to their safety and serviceability.

(vi) On vessels electrically equipped the generators, batteries, wiring, fuses and electric motors shall satisfy the inspector as to their safety and serviceability.

(vii) All cooling water pumps, main and auxiliary injections, cooling water valves lines, discharge water valves and lines shall satisfy the inspector as to their serviceability.

Bilge pumps

23. Every vessel of Class B III, C and D shall be equipped with an adequate serviceable manual bilge pump and if fitted with an engine, shall in addition be fitted with an adequate serviceable mechanical bilge pump. Every vessel of Class C III, D II and III shall in addition to the above pumps be equipped with a serviceable portable bilge pump. Every vessel required to be fitted with

bilge pumps, shall be fitted with bilge lines, valves and valve boxes, sounding pipes and strum boxes to the satisfaction of the inspector.

Provisions and exception

24. Where these Rules require. that a particular fitting, appliance, or apparatus, or type thereof, shall be fitted, or carried in a vessel, or that any particular~ provision shall be made, the licensing officer may allow any other fitting, appliance or apparatus, or type thereof, to be fitted or carried or any other provision to be made, if he is satisfied that it is at least as effective as that required by these Rules.

SCHEDULE F

1. Rules for determining the maximum deadweight which may be carried on any vessel under regulation 29.
   (i) Every vessel shall be surveyed by an inspector who may order weights to be loaded, moved or discharged in order to ascertain the safe quantity and stowage of cargo, water, fuel, stores, etc., that may be carried.
   (ii) Where practicable, an inclining experiment shall be performed in order to ascertain the meta-centric heights of the vessel in all stages of loading.
2. Rules for determining the position, shape and dimensions of the deckline and loadline under regulation 30.
   (i) The deckline shall be 12 inches in length and 1 inch in breadth marked amidships with its upper edge passing through the point where the continuation outboard of the upper surface of the freeboard deck intersects the outer surface of the shell.
   (ii) The load line disc shall be directly under the deckline.
   (iii) The loadline disc shall be so placed in relation to the water level that when the vessel is fully loaded with the maximum deadweight permitted under regulation 29, the centre of the loadline disc shall correspond to the waterline.
   (iv) The circle of the loadline disc shall be 1 inch in breadth and of 8 inches outside diameter, and shall be intersected horizontally by the loadline which shall be 1 inch in breadth and 12 inches in length, the upper edge of which shall pass through the centre of the disc.
   (v) The upper edge of the deck line and the upper edge of the loadline shall be carved or cut into the hull of the vessel as directed by the licensing officer, and the lines and disc shall be clearly painted with light coloured paint on a dark background or dark coloured paint on a light background.

(vi) The vertical distance between the upper edge of the deckline and the upper edge of the loadline shall be the "assigned freeboard" as shown on the vessel's certificate of seaworthiness, and shall in no case be less than 8 inches.

SCHEDULE G

1. Rules to determine the minimum number of the crew which must be carried on any vessel as prescribed by regulation 26.

(i) Every vessel shall carry a minimum number of seamen, including master and officers, according to her class size as follows —

Class of Vessel	Minimum number of seamen
A	2
B I	1
B II	2
BIII	3
C I and C II	3 seamen with 1 additional seaman for every 20 tons of the vessel's tonnage.
C III	9 seamen
D I	3 seamen with 1 additional seaman for every 15 tons of the vessel's tonnage.
D II	12 seamen
D III	15 seamen

(ii) Where the licensing officer is of the opinion that the number of seamen determined by rule (i) is insufficient for the safe and seamanlike conduct of the vessel, he may, at his discretion, order the number of seamen required to be carried to be increased to such number as he thinks fit.

2. Rules to determine the maximum number of deck passengers which may be carried on any vessel as prescribed by regulation 27.

The number of deck passengers which a vessel may be permitted to carry shall not exceed one passenger for every 12 superficial feet of approved clear deck space, except that where approved boats are carried on deck, additional deck passengers may be carried in each such boat provided that the number of passengers permitted to be carried in any boat shall not exceed 1 passenger for every 3 feet of the length of such boat. No deck space within 2 feet of the waterline and no deck space not habitually used for the carriage of deck passengers shall be included in the clear deck space referred to above.

3. Rules to determine the maximum number of persons which may be carried on any vessel as prescribed by regulation 28.

(i) A vessel of Class A may not carry more than the number of persons determined by a test conducted by the inspector.

(ii)

(a) A vessel of Class B not fitted with approved internal buoyancy tanks may not carry more than 1 person for every 20 cubic feet of the vessel's cubic capacity.

(b) A vessel of Class B fitted with approved internal buoyancy tanks equal in volume to at least one-tenth of the vessel's cubic capacity, may carry not more than 1 person for every 10 cubic feet of the vessel's cubic capacity.

(c) The cubic capacity of any vessel shall be determined by the formula —

(1) Gross cubic capacity $= \frac{L(4A+2B+4C)}{12}$

Where L is the length of the boat; and A, Band Care respectively the areas of the cross sections at the quarter length forward, amidships and the quarter length aft respectively.

In cases where it is impracticable to use the formula (1) set out above, the following formula shall be used:

(2) Gross cubic capacity = L x B x D x Coefficient

Where L is the interior length;

Where B is the interior breadth;

Where D is the interior depth;

and the coefficient is taken to be —

(a) for double ended fine lined vessel as 0.6

(b) for double ended full lined vessel as 0.7

(c) for square sterned fine lined vessel as 0·65

(d) for square sterned full lined vessel as 0·75

The space occupied by an engine and fuel tanks shall be deducted from the gross cubic capacity.

(d) No vessel of Class B shall be permitted to carry more persons than may be seated in reasonable comfort inside the vessel.

(iii)

(a) A vessel of Class C or D, fitted with not more than 2 approved watertight bulkheads may carry not more than 3 persons for every 5 feet of such vessel's length.

(b) A vessel of Class C or D, fitted with more than two approved watertight bulkheads may carry not more than 4 persons for every 6 feet of the vessel's length.

4. Where the master, or principal in charge of a vessel, or the licensing officer is of the opinion that the number of passengers determined by rules 2 and 3 is too great, having regard to weather or other circumstances which may tend to cause the vessel to be unseaworthy on account of the number of persons carried, he may at his discretion reduce the number of persons permitted to be carried by such a number as he thinks fit.

SCHEDULE H

(Regulations 5, 18 and 36)

TABLE OF FEES PAYABLE

1. Fees for a candidate for a certificate of competency as:

		$	c.
(a)	Lagoon coxswain	1	00
(b)	Lagoon engineer	1	00
(c)	Mate of an inter-island vessel	2	00
(d)	Second mate of a foreign-going vessel	2	00
(e)	Engineer (motor-ISO)	2	00
(f)	Master of an inter-island vessel	4	00
(g)	Mate of a foreign-going vessel	4	00
(h)	Engineer (steam or motor-300)	4	00
(i)	Engineer, steam or motor endorsement	4	00
(j)	Master of a foreign-going vessel	6	00
(k)	Engineer (steam or motor-unlimited)	6	00

2. Fee for issue of a certified copy of a certificate of competency $1.

3. Fee for survey for a certificate of seaworthiness for a vessel of —

		$	c.
(a)	Class A		50

(b)	Class B I	2	00
(c)	Class B II	6	00
(d)	Class B III	10	00
(e)	Class C I	20	00
(f)	Class C II	40	00
(g)	Class C III	60	00
(h)	Class D I	40	00
(i)	Class D II	60	00
(j)	Class D III	100	00

4. Fees payable for a licence for a vessel registered outside Tuvalu to engage in trade or passenger traffic within Tuvalu as required by section 22.

		$	c.
(a)	For 1 visit to 1 port in Tuvalu	40	00
(b)	For visits to any ports in Tuvalu for 3 months	74	00
(c)	For visits to any ports in Tuvalu for 6 months	134	00
(d)	For visits to any ports in Tuvalu for 1 year	240	00

NOTE.- The fee for a certificate of seaworthiness or the fee for the licence under item 4 above will be remitted in respect of 1 vessel for each registered religious body in Tuvalu; provided that where there is more than 1 religious body of the same denomination only 1 fee shall be remitted for all such bodies.

SCHEDULE I

1. Prescribed form of application to take an examination for a certificate of competency as master, mate or second mate of a foreign-going vessel, or as master or mate of an inter-island vessel, or as lagoon coxswain, as required under regulation 5.

FORM I.1 - APPLICATION FOR EXAMINATION

Name in full .....

Date of application .....

Certificate of competency for which applicant wishes to be examined .....

Certificate of competency which applicant now holds .....

Age of applicant .....years

	As seaman	As inter-island mate	As foreign-going 2nd mate	As inter-island master	As foreign-going mate
Total sea service in months for which certificates are now produced					

SIGNATURE OF APPLICANT .....

2. Prescribed form of Sight Test Certificate required under regulation 5.

FORM I.2 - SIGHT TEST CERTIFICATE

I have today examined ..... and find that his vision and colour vision are adequate for a seafarer.

SIGNATURE OF MEDICAL OFFICER .....

DATE .....

NOTE.- This Certificate is valid for 6 months only from date of issue.

3. Prescribed form of Sea Service Certificate required under regulation 5.

FORM I.3 - SEA SERVICE CERTIFICATE

This to certify that ..... has served as ..... on the lagoon service/inter-island/foreign-going vessel .from ..... to ..... under my command.

My opinion of his character and efficiency is as follows —

SIGNATURE OF MASTER .....

DATE .....

4. Prescribed form of Engineering Service Certificate required under regulation 5.

FORM I.4 - ENGINEERING SERVICE CERTIFICATE

This is to certify that ..... has served as .....on the ..... from .....to .....under my charge.

My opinion of his character and efficiency is as follows —

SIGNATURE OF PERSON IN CHARGE .....

NOTE.-When employed ashore this should be signed by the person in charge of the workshop.

When employed as assistant engineer this should be signed by chief engineer.

When employed as chief engineer this should be signed by master.

5. Prescribed form of application to take an examination for a certificate of competency as an engineer, as required under regulation 5.

FORM I.5 - APPLICATION FOR EXAMINATION

Name in full .....

Date of application .....

Certificate of competency for which applicant wishes to be examined ....

Certificate of competency which applicant now holds .....

Age of applicant .....years.

	In Shop	At Sea		
		As	As	As
Total service for which certificates are now produced				

SIGNATURE OF APPLICANT .....

6 Prescribed forms for Certificate of Competency required under regulation 14.

FORM I.6 – TUVALU CERTIFICATE OF COMPETENCY AS LAGOON COXSWAIN

This is to certify that .....has been found competent to fulfil the duties of principal in charge of a lagoon service vessel in ..... lagoon.

No .....Place .....Date .....

SIGNATURE OF HOLDER :.....

SIGNATURE OF ISSUING OFFICER .....

Issued in pursuance of section 7 of the Lagoon Shipping Act.

Extract from section 2 of the Lagoon Shipping Act ... "lagoon service vessel" means any vessel going generally within the protection of land or reefs or as may be specifically endorsed on the certificate of seaworthiness.

FORM I.7 – TUVALU CERTIFICATE OF COMPETENCY AS MASTER/MATE INTER-ISLAND VESSEL

This is to certify that .....has been found competent to fulfil the duties of .....of an inter-island vessel in Tuvalu.

No .....Place .....Date .....

SIGNATURE OF HOLDER :.....

SIGNATURE OF LICENSING OFFICER .....

Issued in pursuance of section 7 of the Lagoon Shipping Act.

Extract from section 2 of the Lagoon Shipping Act ... "inter-island vessel" means any vessel going into any ports or places in Tuvalu beyond the protection of the reefs.

FORM I.8 – TUVALU CERTIFICATE OF COMPETENCY AS MASTER/MATE/SECOND MATE OF A FOREIGN-GOING VESSEL

This is to certify that .....has been found competent to fulfil the duties of .....of a foreign-going vessel.

No .....Place .....Date .....

SIGNATURE OF HOLDER :.....

SIGNATURE OF LICENSING OFFICER .....

Issued in pursuance of section 7 of the Lagoon Shipping Act.

Extracts from section 2 of the Lagoon Shipping Act ... "foreign-going vessel" means any vessel going between some place or places beyond the limits of Tuvalu.

FORM I.9 – TUVALU CERTIFICATE OF COMPETENCY AS LAGOON ENGINEER

This is to certify that .....has been found competent to take charge of diesel or petrol engines of a lagoon service vessel in Tuvalu.

No .....Place .....Date .....

SIGNATURE OF HOLDER :.....

SIGNATURE OF LICENSING OFFICER .....

Issued in pursuance of section 7 of the Lagoon Shipping Act.

FORM I.10 – TUVALU CERTIFICATE OF COMPETENCY AS ENGINEER (MOTOR-ISO)

This is to certify that .....has been found competent to take charge of diesel or petrol engines up to and including 150 brake horse power.

No .....Place .....Date .....

SIGNATURE OF HOLDER :.....

SIGNATURE OF LICENSING OFFICER .....

Issued in pursuance of section 7 of the Lagoon Shipping Act.

FORM I.11 – TUVALU CERTIFICATE OF COMPETENCY AS ENGINEER (MOTOR/STEAM-300)

This is to certify that .....has been found competent to take charge of main engines over 150 brake horse power and up to and including 300 brake horse power.

No .....Place .....Date .....

SIGNATURE OF HOLDER :.....

SIGNATURE OF LICENSING OFFICER .....

Issued in pursuance of section 7 of the Lagoon Shipping Act.

ENDORSEMENT

The holder of this certificate has been found competent to take charge of the steam, diesel or petrol main engines over 150 brake horse power and up to and including 300 brake horse power.

No .....Place .....Date .....

SIGNATURE OF LICENSING OFFICER .....

FORM I.12 – TUVALU CERTIFICATE OF COMPETENCY AS AN ENGINEER (MOTOR/STEAM-UNLIMITED)

This is to certify that .....has been found competent to take charge of main engines over 300 brake horse power.

No .....Place .....Date .....

SIGNATURE OF HOLDER :.....

SIGNATURE OF LICENSING OFFICER .....

Issued in pursuance of section 7 of the Lagoon Shipping Act.

ENDORSEMENT

The holder of this certificate has been found competent to take charge of the steam, diesel or petrol main engines over 300 brake horse power.

No .....Place .....Date .....

SIGNATURE OF LICENSING OFFICER .....

7. Prescribed form of application for the survey of a vessel for a Certificate of Seaworthiness required by regulation 18.

FORM I.13 - APPLICATION FOR SURVEY

Name of vessel .....

Record No. and date .....

Date of application .....

Class of vessel .....

(As shown in Schedule A of the Shipping Regulations)

Date of expiry of the present certificates if any .....

I hereby apply for a survey of the above vessel in accordance with regulation 20 of the Shipping Regulations.

SIGNATURE OF THE MASTER OR OWNER .....

8. Prescribed form for a Certificate of Seaworthiness required under regulation 20 for vessels of Class C and D.

FORM I.14 - CERTIFICATE OF SEA WORTHINESS INTER-ISLAND OR FOREIGN-GOING VESSELS

This is to certify that the vessel .....particulars of which appear below, has been found seaworthy, under the provisions of regulation 20 of the Shipping Regulations in pursuance of which this certificate is now granted and shall remain valid until .....20 ....., unless revoked.

Name of vessel .....Name of owner .....

Class .....Number, port and date of registry .....

Net tonnage ..... Minimum number of crew required .....

Maximum number of deck passengers permitted .....

Maximum number of persons permitted .....

Maximum deadweight permitted .....tons, of which a maximum of ..... tons may be carried on deck.

Minimum permitted freeboard .....

Fresh water capacity .....gallons.

Emergency rations: Biscuits .....lb Meat .....lb.

Number, weight and type of anchors .....

Length and size of cables: port. .....starboard .....

Navigation lights..... Signalling lamp .....

Radio. ..... Semaphore flags .....

International Code, volumes .....

Flags..... Bell..... Foghorn..... Whistle or Siren .....

Fire extinguishers: CTC ..... 2 gallon fluid .....

2 gallon foam..... 10 gallon foam..... Fire buckets .....

Fire pump: Mechanical .....Manual ..... Hose .....

Smoke helmet .....Hatchets .....Line throwing apparatus .....Distress signals .....Smoke signals .....

Life-jackets .....Life-buoys .....(.....with lights .....with lines).

Medical chest .....

Buoyant apparatus —

		Type	No. of persons	Equipment	If in davits
No.	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				

Total capacity .....Lifeboats .....Other boats .....Rafts .....

Propelling machinery —

Auxiliary machinery —

Bilge pumps: .....Mechanical Manual .....

INSPECTED

Hull	Fixtures	Fittings	Radio
Anchors and cables	LSS	LSA	
Accommodation	Pumps	Propelling machinery	

SIGNATURE OF LICENSING OFFICER .....

DATE .....

Issued in pursuance of section 14 of the Lagoon Shipping Act.

9. Prescribed form for a Certificate of Seaworthiness required for vessels of Class B under regulation 24.

FORM I.15 - CERTIFICATE OF SEAWORTHINESS LAGOON SERVICE VESSEL

This is to certify that the lagoon service vessel particulars of which appear below, has been found seaworthy under the provisions of regulation 20 of the Shipping Regulations in

pursuance of which this certificate of seaworthiness is now granted and shall remain valid until .....20 ....., unless revoked.

Place ..... Date .....

Name of vessel ..... Name of owner .....

Class .....

Limits within which vessel has permission to ply .....

.....

Minimum number of crew required .....

Maximum number of persons permitted (including passengers and crew) .....

Maximum deadweight permitted .....of which a maximum of ..... may be carried on deck.

Minimum permitted freeboard under regulation 30 .....

Date last beached .....

Fresh water carried..... Emergency rations .....

Number, weight and type of anchors .....

Length and size of cables: port ..... starboard .....

Navigation lights ..... Equipment .....

Fire extinguishers: CTC ..... 2 gallon fluid .....

2 gallons foam ..... Buckets .....Distress signals .....

Life-jackets ..... Life-buoys .....

Engine .....

Inspectors .....

SIGNATURE OF LICENSING OFFICER .....

DATE .....

Issued in pursuance of section 14 of the Lagoon Shipping Act.

10. Prescribed form for a Certificate of Seaworthiness, required for vessel of Class A under regulation 24.

FORM I.16 - CERTIFICATE OF SEAWORTHINESS - CANOE

This is to certify that the canoe ....., particulars of which appear below, has been found seaworthy under the provisions of regulation 20 of the Shipping Regulations, in pursuance of which this certificate is now granted and shall remain valid until .....20 ....., unless revoked.

Place ..... Date .....

Name of vessel..... Name of owner .....

Limits within which vessel has permission to ply .....
.....

Maximum number of persons permitted .....

Fresh water carried .....

Issued in pursuance of section 14 of the Lagoon Shipping Act.

SIGNATURE OF LICENSING OFFICER .....

DATE .....

11. Prescribed form of licence for a vessel registered outside Tuvalu, engaged in trade within Tuvalu, as required by section 22 and regulation 36.

FORM I.17 - TUVALU LICENCE TO TRADE

(for vessels registered outside Tuvalu and not holding a Tuvalu Certificate of Seaworthiness)

Name of vessel ..... Registered tonnage .....

Number, date and port of registry .....

Loadline certificate issued by .....

Valid until .....20 .....

Passenger certificate issued by .....

Valid until .....20 .....

Number of passengers, Saloon ..... Deck .....

The vessel whose particulars are shown above is hereby licensed to engage in trade and or passenger traffic within Tuvalu.

This licence shall be valid for 1 visit to 1 port in Tuvalu 3 months/6 months/12 months from the date of issue.

SIGNATURE OF LICENSING OFFICER .....

DATE .....

ENDNOTES

[1] GN 30/1958, LN 3/1982, Act 11/1987

[2] Cap. 48.28