(v) Boats should conform to sanctioned timings at starting stations. Boats arriving later or earlier than sanctioned timings at intermediate stations are liable to cancellation of sanctioned timings unless satisfactorily explained. Late arrivals due to engine trouble or weather conditions should be recorded by the boat master in the Log Book and attested by passengers.

(vi) Boats arriving at an intermediate station earlier than the scheduled time are liable to be detained until the time fixed for departure.

(vii) Boats running on the same line shall not follow one another too closely not overtake one another in narrow waterways.

(viii) Boats shall be allowed at the jetty only for such time as is needed for passengers to embark and disembark at the several stations as the Jetty Superintendent directs.

(ix) The owner or agent of a boat who is for the time being in immediate charge of the boat shall affix his signature to any observations that may be entered in the log book either by the Jetty Superintendent or the Canal Officer regarding the number of passengers or time of arrival and departure of the boat or any infringement of the rules under the Public Canals and Public Ferries Act. He shall in no case refuse to affix his signature thereto when called on to do so but if he has reasons to differ from such entries he may note his own explanation therein.

(x) A table of fares fixed in accordance with Rule 69 of the Rules under the Public Canals and Public Ferries Act shall be posted in a conspicuous place at each and every jetty and also in the boat for the infornation of the passengers and the Ganal Officer and the Jetty Superintendent shall be empowered to insist such rates of fares alone being collected from the passengers.

(xi) Admission to lower classes cannot be refused when there is accommodation. Except under Rule 53 under the Public Canals and Public Ferries Act VI of 1096 no passenger shall be refused accommodation in a vessel provided there is room.

(xii) For the infringement of any of the above conditions, the Executive Engineer may exercise the powers vested in him under Section 9 of the Act.

(xiii) Any vessel navigating a public canal in contravention of any of the provisions of the Public Canals and Public Ferries Act or of any rule made thereunder or any conditions of licence or registration prescribe I therefor shall be stopped by the Canal Officer under the powers vested in him by section 15 of the Act and detained (a) until the same is complied with or (b) until the penalty imposed by the Executive Engineer under

section 9 of the Act in lieu of suspension or cancellation of the licence or in lieu of prosecution has been paid or recovered or (c) until the offence, if any, has been enquired into and disposed of.

(Sanction)

10

No.

The timings applied for are sanctioned.

Chief Engineer's Office.

Station.

Chief Engineer.

Date.

75. Failure to adhere to time table.—Failure to adhere to the timings of arrival and departure from a wharf or jetty or any of the conditions pertaining thereto on the part of any steam vessel shall render the owner, master or other persons in charge of such vessel, liable to prosecution or any other penalty which the Executive Engineer or any other officer authorised by him in that behalf may deem fit to inflict under the provisions of the Act, unless such failure or delays are satisfactorily explained to the Canal Officer. In fixing the hours, Railway time shall be adhered to at all places.

Inspection

176. Inspection.—For the purposes of inspection of and the grant of certificates to steam vessels navigating in any public canal or used for any service the Chief Inspector of Boats and the Inspector of Boats shall be the Inspectors under section 24 of the Act. The Inspector of Boats shall be subordinate to and under the control of the Chief Inspector of Boats. The Chief Inspector of Boats may suspend or cancel any certificate of inspection granted by the Inspector of Boats if the former is convinced on his inspection that the certificate was issued fraudulently or erroneously or without sufficient examination.

Note:—In respect of vessels plying in Periyar Lake the Assistant Engineer (B. & R.) Peermade is declared as an Inspector for the purpose of Inspection of vessels under section 67 (2) (a) of the Act and he will exercise all the powers of the Chief Inspector of Boats described in Rule 76 above for inspection and issue of D-1 and D-2 fitness certificate to the vessels plying in Periyar Lake on realisation of inspection fees prescribed in Appendix C of these rules.

*76 A. Duties of the Chief Inspector.—In addition to the administrative and technical duties devolving on the head of an officer the Chief Inspector shall attend to the following specific duties:—

(1) Receive applications for inspection of boats.

¹. ³. Inserted by G. O. Ms. 774/58/P.W. dated 13th September 1958. 22/623/B

- (2) Fix the date and place of inspection of boats and either direct the Inspector to inspect the boats or inspect them personally.
 - (3) Issue certificates of inspection to the boats inspected by him
- (4) Obtain and verify the list of boats for which certificates of inspection have been granted by the Inspector and check and modify the conditions of any certificates granted by the Inspector as may be found necessary.
- (5) Receive applications for examination of boat crew and publish in the Gazette the time and place of the holding of such examinations and either direct the Inspector to conduct the examination or conduct it personally. When the Inspector is called upon to conduct the examination the papers and records connected therewith shall be obtained and the results published by the Chief Inspector.
- (6) Receive applications for renewal of boat crew competency certificates and maintain registers for renewed competency certificates.
- (7) Grant copies of documents on payment of fees prescribed in the rules and maintain accounts of all dues connected with inspection, crew test and miscellaneous receipts.
- 3 76 B. Duties of Inspector.—The Inspector shall be subordinate to the Chief Inspector and shall discharge the following specific duties:—
- (1) Attend to the inspection of boats as per directions from the Chief Inspector of Boats.
- (2) Attend to the examination of boat crew as per directions from the Chief Inspector of Boats.
 - (3) Maintain registers of steam vessels and boat crew.
- (4) Submit to the Chief Inspector weekly reports regarding inspection certificates granted to steam vessels.
- (5) Conduct surprise inspections of boats and report the action taken in each case to the Chief Inspector.
- (6) Check the validity of competency certificates as may be directed by the Chief Inspector.
- (7) Attend to any special work as may be delegated or directed by the Chief Inspector.
- (8) Submit progress reports of work done every ten days to the Chief Inspector.
- 77. Duties of the Chief Inspector of Boats regarding hull inspection shall be .-
- (a) To determine whether the hull of a vessel is in proper condition and fit for the service for which she is intended.
- (b) To test stability of the vessel so as to ensure against capsizing under any conditions.
 - a. Inserted by G.O. Ms. 774/58/PW., [dated 13th September 1958.

- (c) To ascertain that the anchors chain, rigging masts, sails lights, likebuoys, curtains passengers, accommodation and their other requirements, conveniences, precautionary arrangements against accidents of fire, collision, etc. are in order and that generally the vessel is fully equipped for the safety and convenience of passengers.
- 78. Duties of Chief Inspector of Boats regarding engine inspection.—The duties of the Chief Inspector of Boats regarding engine inspection shall be:—
- (a) To survey or examine the engines, boilers, prime movers and all other machinery and apparatus used in or in any way connected with the propelling of the vessel.
- (b) To test by hydraulic pressure, if necessary, the strength of the boilers and to regulate the weights or loads on the safety valves.
- (c) To satisfy himself that every boiler is fitted with two safety valves (one to be called the Government safety valve) so constructed that it shall be impossible for the engine driver to alter the pressure upon them when the vessel is under steam.
- Note:—A locked safety valve of which the key is kept by the master shall be sufficient.
- (d) To see that the Government safety valve is of an area not less than the area of the other and that there is no enclosed chamber round it to impede the free escape of steam.
- (e) To satisfy himself as to the condition of all water communication cocks and valves and see that the provision for water supply to the boilers is ample and in order and generally to satisfy himself with regard to such other matters in connection with the boiler and machinery as he may consider necessary.
- 79. Inspection of steam vessels.—(a) Steam vessels shall be inspected and D form certificates of fitness issued for periods of six months or less according to the condition of each vessel. The first inspection of a vessel and an inspection conducted after the expiry of the validity of the last Certificate issued for a vessel shall be deemed to be special inspections. The owner, master o other person in charge of a vessel shall remit the fee prescribed in appendix C in respect of each vessel into any of the State Government treasuries and forward to the Inspector the chalan receipt together with an application giving details of the vessels to be inspected. The Inspector shall then fix the date and place of inspection and inform the applicant thereof. Inspections shall ordinarily be conducted within 15 days of receipt of applications. The owner, master or other person in charge of a vessel shall watch the date of expiry of validity of the inspection certificate issued to the vessel and apply for the next Inspection not less than 15 days is advance of such date of expiry, in order to avoid special inspection and payment of double fees.

- Note:—In the case of a vessel, the owner of which is unable to offer the vessel for inspection at the place and date specified by the Chief Inspector of Boats, the owner should apply to the Chief Inspector of Boats at least one week prior to the appointed date of inspection for the postponement of inspection to any other date during the currency of the D form certificate failing which the inspection fees already remitted will be forfeited to Government and double inspection fees will be realised for subsequent special inspection of the vessel.
- (b) The object of inspection is to see that the vessels are in proper state of repair, that their fittings and machinery are in good working order, that suitable provision is made against accidents, that the vessel is in charge of competent crew and that the vessel is properly equipped and kept clean and rendered in every respect fit for navigation for a period of six months or less as the case may be. Should it be apparent on inspection that the vessel is too dirty and not in a fit state of repair for passenger traffic or if it is found that the vessel has not been overhauled, cleaned, repaired or equipped in readiness for inspection, the Inspector may refuse a detailed examination.
- (c) Certificate of inspection shall be in Form "D" appended to these rules.

No. PWM6-10073/51/PW & C/12-9-1952.

280. First inspection of vessels. -On receipt of proper application seeking inspection of a vessel for the first time or for a subsequent inspection of a vessel, the validity of who e inspection certificate has espired already, the Inspector after appointing the date and place of inspection shall arrange to inspect the vessel and grant the prescribed certificate in case he sees no objection to do so. The Canal Officer shall on production of the above certificates and on production of the fees prescribed in appendix A issue a licence in form A appended to these rules or in case the vessel has been licensed already in the same financial year, endorse without fees the validity of the licence for the further period within the year covered by the inspection certificate. If the place fixed for the special inspection is other than the place from which the inspection is sought or where the vessel lies, such vessel may be allowed under a pass in form E from a Canal Officer to proceed to such place and such cass shall hold good for one trip (to and fro) only, provided that the vessel shall not carry passengers until the inspection certificate (in form D) and the licence (in form A) have been granted. An infringement of this rule shall render the owner and master and other person in charge of the vessel liable to prosecution.

- 81. Before a steam or motor vessel is taken to the ! Chief Inspector of Boats for inspection and grant of the D 1 Form Certificate, the owner master or other person in charge of the vessel shall previously arrange that—
- (i) the machinery shall be kept cool, empty and cleaned inside an outside;
- (ii) in the case of a steam boiler keep the fire flues swept, fire bars an fire bridges removed, blow off and other ceeks cleared and it required remove any brick work masonry in contact therewith;
- (iii) the machinery shall be disconnected from any kind of communication with any other machinery during such examination.
- 82. If the Chief Inspector of Boats finds on inspection that the condition of the boiler of machinery of the vessel is fit and safe for navigation, he may grant to it the D. I form certificate appended to the rules.
- 83. Examination of safety valve.—Before the cer ificate in form D is issue to the owner or master, the safety valve of the boiler shall be examine under steam by the Chief Inspector of Boat; to see that they actually blooff at the pressure recorded on the certificate after which the safety valve shall be locked and seals placed across the key holes of the locks and the keys handed to the owner or master of the vessel. Whenever such owner of master has occasion to break these seals he shall forthwith report the fact of the nearest Canal Officer with the explanation for his action. If the explanation is satisfactory the locks shall be resealed, if unsatisfactory, the penalties prescribed in either section 59 or section 60 of the Act may be imposed.

84. Grant of D-2 certificate by the Chief Inspector of Boats.—(a) When steam or motor vessel has been examined and found fit for the grant of the D-1 form certificate, the Chief Inspector of Boats will further inspect in hull and equipments to certify as to its stability proper equipment and the soundness and strength of the hull and generally for the safety and convenience of the travelling public and if the same is found fit and safe for navigation, he may grant to the vessel the D2 form certificate appended the rules.

The Inspector shall satisfy himself that the proportions of the vesse are such as to provide ample stability to carry with safety the number passengers for which the vessel has been measured and if in doubt to test it stability of vessel by placing weights equal to the total weight of passenge and crew at 140 lbs. for each person such weights to be placed to one sit of the midship line or within the area which would be occupied by the passengers crowding to one side. If he deems it necessary, the inspect may reduce the number of passengers limiting it to the number that the vessel may carry with safety or he may withhold the certificate at his discretion. When considering the question of stability and strength of the vessel the Inspector shall remember that as many as the total number of passenge on board as can find standing room, are liable to congregate on the upp deck.

¹ Inserted by G.O. Ms. 309/63/P.W., dated 31st July 1963.

⁻ Inserted by G. O. Ms. 774/58/P. W., dated 13th September 1958.

¹ Instrted by G. O. MS. 774/58/P. W., dated 13th September 1958.

- 85. Examination of hull.—(a) The Inspector shall also see to the soundness of the hull and strength and seaworthiness of the vessel generally and satisfy himself that the vessel is properly equipped as hereinafter provided in these rules. If the Inspector considers it necessary to have the vessel dry docked to enable the hull being carefully examined he may order it to be done. All expenses incurred in carrying out these tests shall be borne by the owner of the vessel.
- (b) such Inspector shall also prescribe the number of passengers that may be carried in each part or section of the vessel.
- (c) No steam vessel intended for passenger service which is found on measurement to be less than fifty passenger capacity shall be permitted to run on service in open backwaters. Only larger vessels shall be allowed to ply in the Vembanad Lake. For purposes of this Rule, open backwaters mean the backwaters covered by lakes. The routes in which the smaller vessels may ply in exception to this Rule shall be defined by the Chief Engineer by notification in each case in the Government Gazette. It is hereby notified for the information of all concerned that the existing steam vessels below 50 passenger capacity may ply in the following routes.—
 - (1) Alleppey-Chettippuzha
 - (2) Alleppey-Changanacherry
 - (3) Alleppey Chathankari
 - (4) Alleppey -Mannar -
 - (5) Alleppey -Thalavady
 - (6) Alleppey -Pulickeezhu
 - (7) Alleppey—Chengannoor
 - (8) Vaikom Neendoor
 - (9) Kottayam-Pulinkunnu
 - (10) Alleppey-Pulinkunnu
 - (11) Mannar-Kottayam
 - (12) Champakkulam--Kottayam
 - (13) Ambalapuzha-Kottayam
 - (14) Ambalapuzha-Changanacherry
 - (15) Changanacherry-Edathua
 - (16) Changanacherry-Payippad 1
 - (17) Changanacherry-Neelettupuram
 - (18) Edathua Kottayam
 - (19) Karumady—Changanacherry
 - (20) Thalavady-Thakazhi
 - (21) Changanacherry-Neelamperoor.
- (d) Only good quality teakwood shall be used for building the hull of steam and motor boats intended for passenger service. The hull planks of such vessels should have a minimum thickness of 1". Repairs to existing vessels may however be done using other species of timber also.

- "(e) The boat "M. B. Aranya Devi" belonging to Messer. Kerala Tourist and Handicratt Corporation (Private) Limited, Trivandrum and fitted with outboard engine without gear arrangement will be issued half yearly fitness certificate in Form D-1 for a period of three years from 13th February 1968 for plying in Periyar lake at Thekkady".
- 86. Appeal on the decision of the Chief Inspector of Boats .- "If the Chief Inspector of Boats finds on inspection that the condition of the hull, boiler, machinery or other equipment of the vessel renders it unfit or unsafe for navigation or is not strong enough to work at the full pressure at which the boiler is intended to be worked or is not fit to be given the D1 and D2 form certificates for the full period of six months under rule 79, the Inspector shall be bound to give to such owner in writing within 48 hours his reasons for such opinion and shall communicate to him the repairs which have to be carried out or the equipment to be provided in order to rectify the defects. In case of the owner feeling aggrieved at the decision of the Inspector, he may appeal to the prescribed authority who may on levying twice the amount of the fees chargeable for the 1st inspection shall appoint 2 other Inspectors and their decision shall be final. But the vessel shall not be used until the matter has been finally decided, unless the conditions of the decisions appealed against are complied with in the meantime and further service allowed by the prescribed authority.
- 87. Currency of certificate.—Every certificate of inspection of a steam vessel shall be granted for a period not exceeding 6 months unless it appears to the Inspector that the boiler, engine or other appurtenances attached thereto, will not remain in good condition for so long a period, in which case the certificate shall be granted for a shorter period as the Inspector may deem fit, ordering at the same time the production of the vessel at the end of that period for re-examination.
- 88. Special Inspection.—In addition to the half-yearly inspection referred to in the foregoing rule it shall be open to the Inspector to hold special or partial inspection of any vessel at any time such Inspector may consider necessary.
- 89. Interim examination of steam vessels.—If a steam vessel which has been granted a certificate as prescribed by the rules is found by the Canal Officer at any time between the two periodical inspections specified in Rule 79.
- (i) Unfit for public use for want of cleanliness, repairs or the prescribed equipment for the convenience and safety of the travelling public.
- (ii) To give frequent trouble by stoppages owing to disorder in the machinery or other causes.
- (iii) To have deteriorated so far in general condition as to make it unsuitable as a public carrier.
- (iv) To have been worked at a greater pressure than or under condition prejudicial to, those that have been prescribed under such certificate.
- (v) To be incapable of continuing to work at the pressure prescribed for the boiler in the certificate already issued.

Such Canal Officer shall report to the Executive Engineer to get the licence of the vessel suspended until the defects mentioned are rectified and the vessel passed for navigation after re-examination. In every such case, the Executive Engineer shall notif; to the owner in writing the reason for such action and communicate the matter to the Chief Inspector of Boats as the case may be, who shall thereupon fix a suitable time for such re-examination.

90. Provision of spare parts.—The Inspector may call upon the owners of masters of steam vessels to have always in readiness in the vessels, such spare parts of engines or machinery as the Inspector may consider necessary and to insist that the same be always kept in the vessel so that they may be available in emergencies. The Canal Officers may occasionally board these vessels and see among other matters that such spare parts as are specified by the Inspector, are kept ready in the vessel.

Precautions against danger

91. Lifebuoys of steam vessels.—(1) Steam vessels plying for hire with passengers shall be provided with life buoys, which shall be kept in a convenient place ready for instant use as under.

I No. Life busy for a vessel of 40 ft. in length and under.

2 Nos. Life buoys for a vessel of over 40 ft. in length and under 60 ft.

4 Nos. Life buoys for a vessel of over 60 ft. in length.

Each life buoy must be 30 inches external diameter—with a buoyancy of 32 lbs. for 24 hours.

(2) Lite saving appliances as per the ports standard (detailed below) shall be provided in all steam vessels plying or destined to ply with passengers in the Cochin Pert area.

Details of life saving appliances as per port's standard.—All registered crafts should have sufficient number of approved buoyant apparatus and life buoys to carry at least 70% of the total number of persons carried,

(a) The minimum number of life buoys required according to the length of the vessel is as follows:—

Vessels not exceeding 30 ft. in length:		2 life buoys.
Vessels exceeding 30 ft. but not exceeding 35 ft	.,	4 20
Vessels exceeding 35 ft. but not exceeding 40 ft.	***	6 ,,
Vessels exceeding 40 ft. but not exceeding 50 ft.		8 ,,
Vessel above 50 ft. but not exceeding 100 ft.		40
		,,

(b) A vessel plying not more than three miles from the starting point in any direction must carry approved buoyant apparatus sufficient to provide buoyancy for at least 40 per cent of the total number of persons on board and approved life buoys not less in number than specified in para (a). The buoyant apparatus, together with the life buoys shall be sufficient to provide buoyan y for at least 70 per cent of the total number of persons carried on board.

Each approved life buoy is to be regarded as buoyancy for two persons. In the case of vessels not exceeding 26 feet in length approved life buoy may be allowed instead of buoyant apparatus at the discretion of the licensing authority, who should take into consideration the plying limits assigned. All the life buoys and appliances are to be so stored as to be immediately ready for use, and should not be lashed down.

In the existing vessels and in any other where it may be difficult to carry the amount of buoyant apparatus required by para (b) some relaxation may be made at the discretion of the licensing authority, provided the defficiency in buoyant apparatus is made good by the substitution of approved life buoys.

Note:—Life saving appliances as under rule 91 (2) shall be provided on or before 1st April 1965.

- (3) In respect of vessels plying in Periyar Lake the following special requirement also shall be complied with—
- (a) All boat crew should possess sufficient training in rescue work in addition to artificial respiration and first aid. The boatmen should be maintained in good trim by regular refresher courses and surprise exercise.
- (b) Each boat should carry simple life belts equal to the number of its passengers carrying capacity plus one or life buoys at the rate of one for two passengers.
- (c) One pair of oars should be kept in readiness for use in the event of power failure
- (d) All boats should have headlights and handtorches and hurricane lanterns.
- (e) Boats should be sturdy and maintenance standards rigid. The under water material should be sound, strong and sea worthy.
- 92. Steam vessels shall be provided with anchors and equipment and such other equipments, as the Inspector may direct including mooring rope, having lines, boilers bilge pumps, buckets etc.
- 93 Lamp rooms to be proceed.—No lamp rooms or portions of boats as are used for trimming and lighting lamps or storing inflammable oils, shall be situated so as to abut on passenger's quarters or open out into passages leading to such quarters. Such rooms may be located at the extremity of the passengers quarters, provided that the surrounding bulkheads are of iron or fire proof and the rooms open out on deck.

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94. Fire extinguishing appliances.—(a) Steam vessels plying for him with passengers shall be provided with fire extinguishing appliances consisting of boxes of sand with scoops for applying the sand and with fire buckets as shown in the following scale or as may be ordered by the Inspector:—

Length of vessel	Boxes of sand capacity	Number of fire buckets
Under 40 ft. in length	•• 1 cft.	1
40 ft. and under 50 ft.	2 ,,	2
50 ft. and under 60 ft.	2 ,,	3
60 ft. and under 80 ft.	2 ,,	4
80 ft. and upwards	2 ,,	6

The boxes of sand and fire buckets shall be conveniently placed ready for immediate use.

- (b) In addition to the fire extinguishing appliances, prescribed in the above sub rule each boat should be compulsorily provided with at least one chemical fire extinguisher the type and capacity of which and the necessity for increasing its number in relation to passenger capacity of any boat may be decided and notified in writing to the owner by the Inspector.
- (c) Fire extinguishing appliances as per the port's standard (detailed below) shall be provided in all steam vessels plying or destined to ply with passengers in the Cochin Port area.

Details of fire extinguishing appliances as per port's standard

(1) Means of keeping the launches clear of water should be provided as follows:—

Launches not exceeding 40 ft. in length and not plying beyond three miles, from the starting point, one bucket, if plying beyond three miles, a hand pump must be carried in addition-launches exceeding 60 ft. in length a power pump connecting to motor and hand pump in addition to the buckets.

(2) Means for extinguishing fire.—The means for extinguishing fire in addition to what is required by para (1) must be in accordance with the following scale.

Vessels not exceeding 50 feet.—One foam fire extinguisher of two gallon size is to be provided in the engine room and one two gallon soda acid extinguisher on deck.

Vessels over 50 feet.—Two froth or foam fire extinguisher of two gallon size. One two gallon soda acid extinguisher for each compartment.

In all vessels a box containing a suitable quantity of sand and a suitable scoop for applying the sand should be provided.

Note:—This rule shall come into force from 1st April 1965.

- 95. Fuel for engines.—For vessels plying for hire with passengers and driven by internal combustion engines, the fuel shall be paraffin or similar spirit and not petrol, but no objection may be raised to the carriage of a small quantity of petrol not exceeding two gallons to facilitate starting the engine. This rule shall not apply to vessels with petrol driven engines already licensed nor to those under construction, provided a written application for exemption is made to the Inspector on or before the 1st of Kumbhom 1100 M. E.
- 96. Fuel tanks.—Fuel tanks shall be well and substantially constructed of suitable material. The tank and its connections shall be perfectly oil tight and shall be tested by hydraulic pressure corresponding to a head of water of at least 15 feet.
- 97. Fixing of tanks—The tanks shall be securely fixed in position and underneath shall be provided a properly supported and suitably lead lined metal tray of sufficient area.
- 98. Precaution against explosion.—In order to reduce the risk of explosion, the arrangements for filling the tanks shall be such that oil or spirit will not readily be spilled or overflow and drain into or lodge in either the compartment containing the tanks or any other part of the vessel; and provision hall be made whereby the vapour displaced when the tanks are being filled, will be discharged over board. If tanks are filled through the decks the wood work surrounding the inlet pipe shall be covered with sheet metal to prevent its becoming saturated with oil or spirit.
- 99. Charging of tanks.—No loose cans of oils or spirit shall be carried in the vessel and the permanent petrol and paraffin tanks shall not be charged when the passengers are on board.
- 100. Relieving pressure in tanks.—Means shall be provided for relieving the pressure in tanks in case of fire. This may consist of (a) a light spring loaded valve or (b) satisfactory fusible plug or similar device.
- 101. Pipes to be made of copper.—The pipe conveying the fuel to the carburettor shall be of solid drawn copper and shall be provided with flexible bends, a cork or valve shall be fitted at each end of the pipe, one on the tank and the other on the carburettor or float chamber and the joints and the couplings shall readily be accessible and such that they can be made and kept perfectly oil light.

Joints made of soft solder shall not be satisfactory and shall not be passed.

102. Ignition tubes.—Ignition tubes shall not be passed unless oils having a higher flash point than 73° is used for all purposes. If blow lamps are used for this class of oil, they shall be fixed and the flame enclosed and the lamps shall be fitted with a relief valve.

- 103 Compartment for tanks.—If the motor and fuel tanks are situated below deck, they shall be confined within a separate water tight and ventilated compartment. The compartment shall be furnished with at least two cowl ventilators, so arranged to prevent accumulation of vapour in the lower part of the space to which one of the ventilators shall extend. Any enclosed space within thich the motor or tank is placed shall be ventilated in like manner, except in the case of small open launches where louvres or other suitable openings can be provided, in which case one cowl ventilator will suffice.
- 104. Metal tray for wooden vessels.—If the vessel is of wood a metal tray which can readily be cleaned shall be fitted under the motor.
- 105. Sheathing inflammable flooring.—Wooden flooring particularly near the motor or tank, shall be sheathed with metal and any part of the wood work subject to excessive heat from the cylinders or exhaust pipes shall be sheathed with metal at d if necessary, an asbestos lining shall also be fitted.
- 106. Easy exit to be provided.—The exit from the engine room shall be easy and as far as practicable from the fuel tank.
- 107. Precaution against fire.—(a) The greatest care shall be taken to prevent an out-break of fire as paraffin oil or wood-work soaked with such oil when once on fire is difficult to extinguish. The greatest safeguard against explosion or fire is cleanlines. Consequently the bilges and woodwork shall be kept free of oil refuse and the tanks and fittings shall be perfectly tigit and dry.
- (b) Smoking on board the passenger vessel driven by petrol engines should not be permitted and notices prohibiting smoking should be posted up in a conspicuous part of the vessel.

Master, Engine Driver and Crew of steam vessels

- 108. Crew for vessels.—(a) All steam vessels shall be manned by a sufficient number of crew as may be determined by the Inspector and no person who in the opinion of the Inspector is not fully qualified or is inefficient shall be employed in any capacity in a boat. The master, syrang, driver and lascars of boats should possess the respective competency certificates prescribed by the rules. The owner of the boat wishing to drive it personally and solely for his personal use is exempt from the necessity of taking out a drivers certificate of competency or service for himself, provided the tonuage of such vessels is below two and a half tons. This exemption does not apply to a driver employed by the owner to drive his motor boat.
- 1(b) In the case of vessels registered under rule 5 (a), the following number of Crew shall be employed:—
 - 1. Vessels less than 3 tons One Driver-cum Syrang possessing both Drivers and Syrang's competency certificate.

- 2. Vessels of 3 tons and One Driver-cum-Syrang possessing above but less than both Driver's and Syrang's competency certificate and one Lascar possessing Lascar's competency certificate.
- 3. Vessels of 5 tons and One Driver, one Syrang and one above

 Lascar, possessing respective classes of competency certificate.

Exemption No. I.—This rule shall not apply to steam vessels that are registered in Malabar under the provisions of Madras Act 11 of 1890 or under the Indian Ports Act, 1908.

Exemption No. II.—The number of lascars in cargo boa's of the Saate Inland Water Transport Service, Trivandrum is limited to two, irrespective of the seating capacity of each boat.

Exemption No. III.—The cargo boats of the State Inland Water Transport Services, Trivandrum are allowed to be loaded with due consideration to the safe free board viz., the clear height of side above water at the lowest point available for each vessel in its fully loaded condition with the complete outfit and supply of fuel on board and with the necessary crew, which shall not be less than that shown in the following table

Length of vessel	Height of free board	
20' and under	1'-3"	. 0
30' do.	1′6″	. A
4 9' do.	1'-10"	
60' do.	2'-0"	
80' and upwards	2'—2"	

for intermediate lengths between 20 and 80 feet, the height of free board should be proportionate.

Exemption No. IV.—The number of lascars in passenger boats of the State Inland Water Transport Services, Trivandrum, shall be two for the boats of passenger capacity up to 149 and three for the boats of passenger capacity of 150 and above.

Exemption No. V.—The following boats belonging to the Kerala Tourist and Handlerafts Corporation (Private) Limited, Trivandrum will be permitted to ply in the Periyar Lake at Thekkady with the complement of crew noted against each from 13-2-1968.

- (a) Boat "Periyar Princess"—One driver, one syrang and one lascar.
- (b) Boat "Countness of Willingdon"—One driver, one syrang and one lascar.
 - (c) Boat 'Aranya Devi"—One driver and one lascar.

¹ Inserted by 4696/P2/70-1/W&P dated 1-8-1974.

109. Master of vessels.—Every steam vessel using a public canal and carrying passengers or cargo shall be in charge of a "Master" who shall be qualified and hold a certificate to that effect under Rule 115. Such master shall be severally and conjointly with the owner or manager of a company owning the vessel be responsible for any or all breaches of the Act. The name of such master shall be registered with the Canal Officer, who issues the licence. Such Canal Officer shall communicate the name of such Master to all the other Canal Officers.

Exemption.—This Rule shall not apply to tugs and to barges and other launches exclusively used for carrying cargo and which do not load or unload cargo at any intermediate station enroute.

- 110. Change of Master to be intimated.—Should the owner or manager of a steam vessel desire to remove a master and appoint another, he shall inform the Canal Officer when the necessary correction in his register will be made.
- 111. Control and discipline of crew.—All the crew employed on board a steam vessel shall be under the control and orders of the master of such vessel, who shall see that proper discipline and good conduct is maintained by them. The crew shall on no account interfere with passengers or behave rudely towards them. Any help or assistance which the passengers may seek in times of need or emergency or accident shall not be interpreted as interference and shall be freely given to passengers by the crew. When the master of a vessel is temporarily absent during a voyage, the Syrang on board the vessel shall be held to be in charge with the powers and responsibilities of the Master. If such absence of the Master exceeds a day a duly qualified Master shall be appointed immediately and the fact communicated forthwith to the Canal Officer concerned.
- 112. Time and place of Examination.—Examination for Master's, Engine Driver's, Syrang's and Lascar's certificates of competency shall ordinarily, provided there be any candidates for examination, be held once in six months at Alleppey or Quilon and the date and place of examination shall be duly notified to the candidates applying for the examination and shall be published in the Government Gazette by the Chief Inspector of Boats, Ernakulam, to whom application shall be made. This officer is appointed as examiner for conducting until further orders, the examinations for Masters, Engine Drivers, Syrangs and Lascar's certificates of competency under Rules. The Chief Inspector of Boats and subject to his control, the Inspector of Boats are appointed as examiners for conducting the Examinations for Masters, Engine Drivers, Syrangs and Lascar's certificates of competency under the Rules.
- or Syrang.—Any candidate taking instruction as Master, Driver or Syrang.—Any candidate taking instruction as Master, Driver or Syrang shall obtain a probationary licence in Form 'O' appended to these Rules countersigned by the Chief Engineer and only such candidate who has taken out such licence and undergone the training according to the conditions specified in the said licence for a period of one year shall be allowed to sit

for the examination conducted by the Department provided that ex-servicemen who have gained sufficient experience as Marine Driver, Syrang or
Master need not take out probationary licences if they produce satisfactory
evidence in support of their experience and get a certificate to that effect
from the Chief Engineer. The fee for the issue of the probationary licence
will be 1 Rs. 5. For all offences against Canal Rules or for incivility negligence
of duty or other irregularity, such probationary licence can be suspended
or cancelled or otherwise dealt with by the Chief Inspector of Boats subject
however to the provision that the cancellation of the probationary licence
requires the previous approval of the Chief Engineer.

FORM 'O'

(Rule 112 A)

Probationary licence granted to an applicant who wishes to undergo training as Master, Driver or Syrang in an inland steam or motor vessels

No.

Fee 1 Rs. 5 (Rupees Five)

is hereby temporarily permitted to undergo training as Master/Driver/Syrang in an inland steam or motor vessel for a period of one year from this date subject to the provisions of the Travancore Public Canals and Public Ferries Rules, 1100 M.E. in this behalf.

Station:

Chief Inspector of Boats.

Date:

Signature of Chief Engined.

Note:—The certificates of competency issued by the Deputy Conservator, Cochin Port under the Cochin Harbour Crast Rules will be recognised for employment of crew in vessels registered under those rules provided that such vessels have the necessary licences for navigating on the state canals and backwaters.

112B. Certificate of competency will be issued to the Lascais now in service on production of chalan receipt for the remittance of the prescribed fee of 1 Rs. 5 before the Canal Subdivision Officer, Alleppey together with an application in Form G accompanied with two copies of photos, a good conduct certificate and a service certificate to show that they have served as Lascars for not less than one year in any steam or motor vessel.

The above amendment shall come into force from 1st December 1955.

¹ Inserted by 19477/P2/73/W&P dated 1-8-1975.

The period extended up to 15th June 1956.

113. Form of application.—Application of candidates of Masters, Engine Drivers, Syrangs and Lascars certificates as the case may be shall be submitted in Form "G" appended to the rules, such applications being accompanied by testimonials two copies of a photograph of any size of applicant and any other evidence relating to their qualification, sobriety and character.

- 114. Eligibility for admission. -No candidates who does not produce satisfactory evidence of sobriety and good conduct shall be eligible for a certificate or service or for admission to examination for a certificate. The authority receiving these applications viz., Chief Inspector of Boats shall decide whether the evidence produced by any candidate is sufficiently satisfactory to justify his sitting for the examination.
- 115. Qualification for Master.—The qualifications to be required of a person desirous of obtaining a Master's certificate of competency shall be as follows:—
 - (1) He shall be able to read and write English or Malayalam
 - (2) He shall be not less than 24 years of age.
- (3) He shall either (a) have served one year at sea and one year as 2nd master of Chief helmsman of an inland steam vessel of not less than 30 nominal horse power or (b) have served three years on an inland steam vessel of not less than 30 nominal horse power, the last one year of which shall have been as 2nd master or chief helmsman.
- (4) He shall unless already holds a Board of Trade sea-going certificate as Mate or Master, satisfy the Examining Board of his ability to distinguish colours.
- (5) He shall pass a satisfactory viva voce examination in the following subjects: -
 - (a) The general principles of river and backwater navigation.
 - (b) The management of steam vessels under all contingencies of meeting, passing and overtaking vessels.
 - (c) Questions regarding the exercise of seamanship in case of difficulty and danger eg: when a vessel has grounded when anchors and chains are carried out, when a vessel has to be got affoat, when the bull is injured or leaking or what steps to take in case of fire or other accident to the vessel.
 - (d) The provisions of the public canals and public ferries act and the rules there under.
- 116. Fee for examination of Master.—The fee for examination of a Master's certificate shall be ¹ Rs. 15 (Fifteen) and it shall be paid by the candidate in advance when submitting his application for examination together with testimonials as to the qualifications as required in the foregoing rules.
 - 1. Amended by 19477/P2/70/W & P dated 1-8-1975.

- 117. Repayment of examination fee.—If the candidate's service is insufficient or if his testimonials do not in other respects fulfil the requirements of the rules, no part of the fee shall be returned but if he should within two years of his first application comply with the requirements of the rules, he shall be examined without payment of an additional fee.
- 117-A. The validity of the competency certificates issued for the first time to the candidates who pass the Masters, Syrangs, Drivers or Lascar's examination shall be for a period of three years from the date of issue of such certificates. This amendment shall take effect from 1st October 1964.
- 118. Form of certificate. Certificates shall be granted in form 'II' appended to these Rules.
- 118-1. If the original of a certificate be lost or spoiled a copy thereof shall be issued by the Chief Inspector of Boats on receipt of an application with the fee fixed therefore in Appendix A appended to these rules and one copy of the applicant's photo. Should there be delay in issuing the copy of the certificate, the Chief Inspector of Boats shall issue a temporary certificate tenable for one month only to enable the applicant to continue in employment during the period between the loss of certificate and the issue of the copy.
- 118-B. Master's, Engine Driver's, Syrang's and Lascar's Certificates of competency shall be renewed for three years at a time on expiry of the period of their validity. Applications for renewal shall be made to the Chief Inspector of Boats, Ernakulam with the original certificate and chalan receipt for the remittance of the fee prescribed therefor in Appendix D to the rules at least fifteen days before the expiry of the period of vail lity noted in the certificate. Any certificate not so renewed shall lapse. A lapsed certificate may be renewed only on payment of the enhanced fee specified in Appendix D to the rules and on production of satisfactory evidence that the holder of the certificate was on good cause prevented from applying for the renewal in proper time. No certificate produced for renewal after a period of three years from the date of expiry of its validity shall, however be renewed. An application for renewal received after this time limit shall, un'il there be anything repugnant to the rules in force be treated as an application t on for a new certificate and the candidate shall be asked to undergo all the formalities required for the grant of a new competency certificate,

The above amendments shall be deemed to have come into force from 1st November 1957. Crew certificates whose validity expires or have expired during the period between 1st November 1957 and 30th December 1957 shall not be considered to have lapsed within that period for purposes of payment of renewal fees.

119. Qualifications for a steam vessel driver.—The qualification required of a person desirous of obtaining a Driver's (Steam Vessel) Certificate of competency shall be as follows:

(1) He shall fully understand the working and management of boilers, the best method of firing and use of gauge glass cocks, blan off, scum cocks and other appliances.

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- (2) He shall be able to some extent to explain the actual working of engines and the separate uses of the feed pumps, slide valves, pistons and other appliances.
- (3) He shall be able to show how he would act in case of the break-down of any portion of the machinery, etc.
- 120. Qualification of Motor Boat Driver.—The qualification required of a person desirous of obtaining a driver's (Motor Boat) certificate of competency shall be as follows:—
 - (1) He shall be not less than 21 years of age.
 - (2) He shall produce a medical certificate as to his physical fitness.
- (3) He shall produce a certificate from the responsible head of the firm or workshops concerned that he had worked for at least two continuous years, of which not less than 6 months shall have been spent in the capacity of an assistant driver in charge of a motor engine or a fitter in an engineering workshop and that he is sober and intelligent.
- (4) He shall pass viva voce examination satisfying the examiners that (a) he fully understands the working and management of motor engines and separate use of magnetos, carburettors water circulating and oil pumps, sparking plugs, etc., and that he is able to some extent, to explain their actual means of operation.
- (b) he is able to dismantle motor engines and any accessory part of them detecting excessive wear or other defect where it exists and correctly reassemble the parts.
- (c) he is able to detect what is wrong in the event of the engine failing to start up or any accessory part to perform its proper duty.
- (d) he is able to show how he would act in case of breakdown of any portion of the machinery.
- (e) he is able to show that he fully realises the danger of fire and understands the precaution necessary to prevent it and what to do when a fire actually breaks out.
- (steam or motor vessel) ce-tificate shall be Rs. 12 (Twelve) and that for a syrang Rs. 12 (Twelve) and it shall be paid by the candidate when submitting his application for examination together with testimonials as to the qualification required in foregoing rules. Conditions of payment of fees shall be the same is for a Master's certificate—See Rules 116
- 122. Qualification of Syrang.—The qualification to be required of a person desirous of obtaining a Syrang's certificate of competency shall be as follows:—
 - (1) the candidate shall not be less than 21 years of age.
- (2) He shall produce satisfactory testimonials of sobriety and intelligence.

- (3) He shall have served either-
- (a) One year at sea and one year as helmsman of an inland steam vessel; or
- (b) Two years on inland water the latter year of which shall have been as helmsman of an inland steam vessel.
- (4) He shall pass a satisfactory viva voce examination in the following subjects:—
 - (a) the colour test.
- (b) what to do when meeting or crossing the tracts of other steamers or vessels and boats under sail.
- (c) the use of the regulation lights and how to act when they are seen in different positions.
- (d) the rules regarding signals by the steam whistle to indicate to other vessels the position of the helm, etc.
- (c) the management of small inland steam vessels under all conditions.
- (f) the rules issued under the public canals and public ferries act relating to the steam vessels and conveyance of passengers therein, etc.
- 122 A. The qualifications to be required of a person desirous of obtaining a lascar's certificate of competency shall be as follows:—

Qualifications for a lascar.—(1) The candidate shall not be less than 21 years of age.

- (2) He shall produce satisfactory evidence of sobriety and intelligence.
- (3) He shall have served on year as poleman in any country craft or other vessels.
- (4) He shall exhibit his ability to swim and dive in canals and backwaters.
- (5) He shall pass a satisfactory viva voce examination in the following.
 - (a) Colour test.
- (b) The use of regulation lights and how to act when they are seen in different directions.
- (c) The rules regarding signals by the steam whistle to indicate to other vessels the position of the helm, etc.
 - (d) The management of inland steam vessels under all conditions.
- 122B. Fee for examination of lascar.—The fee for examination of a lascar's certificate of competency shall be Rs. 6 (six) and it shall be paid by the candidate in advance when submitting his application for examination together with testimonials and accompaniments as required in the foregoing rules.