

**MASTER FOREIGN-GOING.**

**52. Qualifications.\***—A candidate must not be less than twenty-three years of age, and must have served seven years at sea in foreign-going ships or the equivalent, ten and a half years, in home-trade ships (*see* paras. 112 and 113). This period of service must include *either*—

- (a) One year and six months in a capacity not lower than first mate of a foreign-going ship whilst holding a certificate of grade not lower than that of first mate of a foreign-going ship (*see* para. 115); *or*
- (b) Two years and three months in a capacity not lower than that of first or only mate of a home-trade ship whilst holding a certificate of grade not lower than that of first mate of a foreign-going ship; *or*
- (c) Two years in a capacity not lower than that of second of three watchkeeping officers, on a foreign-going ship whilst holding a certificate as first mate of a foreign-going ship; *or*
- (d) Two years and six months in a capacity not lower than third of three watchkeeping officers on a foreign-going ship, whilst holding a certificate of grade not lower than that of first mate of a foreign-going ship; *or*
- (e) Three years as master of a home-trade ship: during at least one year of this service he must have held a certificate of grade not lower than that of second mate of a foreign-going ship or master of a home-trade ship.

A candidate who possesses or is entitled to a Certificate of Service as Master (under para. 16) may be examined for a certificate of competency without producing any evidence of sea service.

For interpretation of watchkeeping service for the purposes of these regulations, *see* para. 116.

**SYLLABUS.****53. Paper 1. (Written.)****PRACTICAL NAVIGATION. (3 hours.)**

A short recapitulation paper in navigation on the syllabus for second mate and first mate, which should include chart work.

**54. Paper 2. (Written.)****METEOROLOGY. (2 hours.)**

Ocean pilotage—*i.e.*, general knowledge of winds and currents, and the selection of routes according to season. Icebergs, ice signals, and ice navigation.

To be able to plot observation of ships and coast stations, received by wireless, and to construct a simple weather chart. To understand the use of the observation of the change of the barometer by single and collective observations; and to make deductions as to probable changes of weather along the proposed track of his ship.

A general knowledge of the system of wireless weather signals (*when* one international system is brought about).

**55. Paper 3. (Written.)****SHIP CONSTRUCTION AND STABILITY. (3 hours.)**

- (a) The direction of simple ship repairs. Drawing up of simple specifications.
- (b) A fuller knowledge of ship construction than in previous examinations. General structure—transverse and longitudinal girders; keels; stern frame, stem and rudder post; centre keelson; bilge and side keelsons; side stringers; tank margin, intercostals; transverse framing; shell plating; rudder propeller brackets, masts and derricks.  
Classification of ships. Tonnage—measurement and registration. Freeboard.  
Treatment of accidents and damage—collision, springing leaks.  
Possible strains incurred by action of waves, improper loading or ballasting, &c.  
Working of ship, division of loads.

\* For convenience of calculation the service required is stated in a tabular form in Appendix I.