

FORM 2. [reg. 7.]
MERCHANT SHIPPING ORDINANCE 1953.
 (No. 14 of 1953).

MERCHANT SHIPPING (LAUNCHES AND FERRY VESSELS) REGULATIONS 1965.
 (M.O. 99)

*TEMPORARY PERMIT FOR AN UNLICENSED VESSEL TO REMAIN
 IN THE WATERS OF THE COLONY FOR A PERIOD
 NOT EXCEEDING ONE WEEK.*

Name of Vessel Foreign Registry No.
 Name of Master Certificate No.
 Tonnage Nett Light Dues Receipt No.
 From Via
 Cargo tons No. of Passengers
 Date of Arrival
 Towing
 Special Conditions

This permit expires on and must be produced at the Marine Department at the time of reporting clearance.

This vessel may be allowed to load cargo, embark passengers or tow any vessel in the waters of the Colony at the sole discretion of the Director of Marine.

Fee \$

.....
Shroff's Signature.

Date
 Audit No.

.....
for Director of Marine.

MARINE DEPARTMENT,
 HONG KONG.

(Chinese Version)

FORM 3. [reg. 8.]
MERCHANT SHIPPING ORDINANCE 1953.
 (No. 14 of 1953).

MERCHANT SHIPPING (LAUNCHES AND FERRY VESSELS) REGULATIONS 1965.

*TEMPORARY OPERATING PERMIT FOR LAUNCHES
 OR FERRY VESSELS.*

The licence book of this vessel is deposited in the Marine Department, Hong Kong, pending

Name of Vessel
 Name of Master Cert. No.
 Name of Engineer Cert. No.
 No. of Passengers allowed including crew within the
 Class I limits Class II limits
 Class III limits Class IV limits

1. This temporary receipt must be kept on board when this vessel is under way and produced on demand to any Marine or Police Officer.

2. This temporary receipt is valid for days only and must be returned in exchange for the Licence Book deposited in the Marine Department.

Date

.....
for Director of Marine.

MARINE DEPARTMENT,
 HONG KONG.

(Chinese Version)

FORM 4. [reg. 14.]
MERCHANT SHIPPING ORDINANCE 1953.
 (No. 14 of 1953).

MERCHANT SHIPPING (LAUNCHES AND FERRY VESSELS) REGULATIONS 1965.

HONG KONG.
CERTIFICATE OF SURVEY
FOR THE HULL, MACHINERY AND EQUIPMENT OF LAUNCHES,
AND FERRY VESSELS.

Issued by the Marine Department (Ship Surveys).

Name of Vessel Licence No. to ply in Class
 Length Reg. Breadth Reg. Depth Reg.
 Tonnage: Gross Nett
 Name of Owner Address

We/I the undersigned Surveyor(s) of Ships hereby certify:—

- (1) That on the day of, 19..... the hull and equipment of the above-named vessel was thoroughly examined and was found to be in good condition and fit for the service intended until the day of, 19.....
- (2) That on the day of, 19..... the machinery, boilers and pressure vessels of the said vessel were inspected and found to be in good condition and fit for the service intended until the day of, 19.....
- (3) That the safety valves satisfy the requirements of the Merchant Shipping Ordinance 1953 and have been set for a maximum pressure of lbs. per sq. inch.
- (4) That the vessel is properly fitted with navigation lights and with the means for making sound signals.
- (5) That the vessel is properly found with anchors and cables.
- (6) That the vessel has been subjected to a stability test and has tons of ballast permanently on board.
- (7) That the vessel is equipped with the following Life Saving Appliances in accordance with the Merchant Shipping (Life Saving Appliances) Regulations 1961.
 Boats B.A. Lifebuoys
 Lifejackets

- (8) That the vessel is provided with the following fire-extinguishing appliances in accordance with the Merchant Shipping (Fire Appliances) Regulations 1935;
- (9) That all openings in the main deck are efficiently protected by coamings or casing and are capable of being closed water-tight, and that all seats are properly secured in position and that suitable awnings are provided.
- (10) That the crew is sufficient for the requirements of the vessel and both the master and engineer are in possession of the appropriate Certificates of Competency issued by the Director of Marine.
- (11) This vessel ^{is}/_{is not} permitted to tow. (When towing no passengers may be carried).
- (12) That the spaces measured for passenger accommodation and the numbers of passengers that the vessel may carry within the various limits are as follows:—

Spaces	Passengers (and Crew)			
	Class I	Class II	Class III	Class IV
Crew				
Cabins				
Cockpit				
Main Deck				
..... Deck				
Total persons				

If the space measured for passenger accommodation is at any time occupied by cargo or passengers' baggage, then one passenger is to be deducted for every 7, 10 or 12 superficial feet of space so occupied, accordingly as the vessel is plying in Class I, Class II, Class III limits, respectively.

Remarks:—This vessel is permitted to ply with a Combined Coxswain and Engineer

This Certificate expires on the day of, 19.....
Hong Kong day of, 19.....

(Paragraphs:—.....)
Surveyor of Ships.

(Paragraphs:—.....)
Surveyor of Ships.

(Delete the portions of the form that do not apply)

This Certificate of Survey shall be securely framed and exhibited at all times in some conspicuous part of the vessel.

FORM 5.

[reg. 19.]

(Front of cover)



LOCAL CERTIFICATE OF COMPETENCY
MASTER
HONG KONG.
UNDER PARTS II, XIII AND XIV OF THE
MERCHANT SHIPPING ORDINANCE 1953.
(No. 14 of 1953).

(Page 1)
M.O. 128

(Inside Front Cover)



MERCHANT SHIPPING ORDINANCE 1953.
(No. 14 of 1953).
HONG KONG.

Certificate No.
Record Book Ref. No.

This is to certify that the Bearer ()

Age Height feet and inches.
Nationality H.K.I.C. No.
has passed the prescribed examination and is considered competent to take charge of a Powered Vessel of 15/60/300 tons and under as Master.

Examination fee \$ Receipt No.

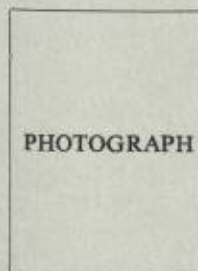
Further Qualifications

(Page 2)

Audit No.

MARINE DEPARTMENT.

Hong Kong 19.....



PHOTOGRAPH

Signature

.....
for Director of Marine.

(Page 3)

ENDORSEMENTS.

Passed Eyesight Test

 for Director of Marine.
 19

(Page 4)

ENDORSEMENTS.

(Page 5)

RECORD OF SERVICE.

Name of Vessel	Date		Signature
	From	To	

(Page 6)

RECORD OF SERVICE.

(Inside Back Cover)

Name of Vessel	Date		Signature
	From	To	

M.O. 59A

FORM 6.

[reg. 19.]

(Front of Cover)



CERTIFICATE OF COMPETENCY
 (ENGINEER)
 HONG KONG.

UNDER SECTION 94 OF THE
 MERCHANT SHIPPING ORDINANCE 1953.
 (No. 14 of 1953).

MARINE DEPARTMENT
 HONG KONG

(Page 1)

(Inside Front Cover)



MERCHANT SHIPPING ORDINANCE 1953.
 (No. 14 of 1953).
 HONG KONG.

Certificate No.

This is to certify that the Bearer

..... ()

Age Height feet and inches.

Native of
 has been examined and is considered competent to take charge of a Steam/Motor

(.....)

Examination fee \$ Receipt No.

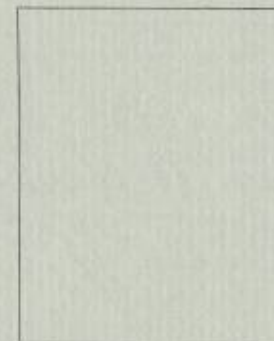
Limitations

(Page 2)

No.

MARINE DEPARTMENT.

Hong Kong 19.....



.....
 Examiner.

.....
 for Director of Marine.

(Page 3)

ENDORSEMENTS.

(Page 4)

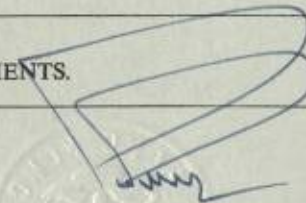
ENDORSEMENTS.

(Page 5)

ENDORSEMENTS.

(Page 6)

ENDORSEMENTS.



Clerk of Councils.

COUNCIL CHAMBER,
29th June, 1965.

Explanatory Note.

(This Note is not part of the regulations, but is intended to indicate their general purport).

These regulations revoke and replace, subject to amendment, Table E to the Merchant Shipping Ordinance 1899.

2. A detailed comparative table is annexed to this explanatory note indicating changes of substance. The form and style of the regulations differs considerably from those of the old Table E.

COMPARATIVE TABLES.

Regulation.	Corresponding provision of Table E.	Remarks.
1	—	Citation and commencement.
2	—	Application. Parts I, VII and IX are applied to pleasure launches.
3	—	Interpretations.
4, 6	1, 2, 5, 6 and 13 (in part)	Modified by the deletion of— (a) the requirements that licensees shall provide sureties in \$1,500 for the observance of conditions of licence, and (b) the table of fees.
5	13(d)	Relating to replacement of lost, damaged or defaced licence books—modified by deletion of the specified fee.
7	30	<i>cf.</i> Issue of special permits.
8	7	Modified to cover licences temporarily deposited with the Marine Department for amendment, etc.
9	—	New. To provide for suspension of licences upon vessel receiving damage until surveyed after repair.
10	—	New. To provide for recording of change of ownership.
11	—	New. To provide for recording of termination requirement for licensing e.g. upon loss of vessel or conversion to pleasure launch, etc.

Regulation.	Corresponding provision of Table E.	Remarks.
12	2 (in part)	To provide that only surveys by Government surveyors are acceptable for purpose of licences.
13	2 (in part)	To provide for the carriage in vessels of their certificates of survey.
14	3	Modified by reference to Form of certificate of survey for particulars to be recorded.
15	3(c)	<i>cf.</i> Maximum number of passengers to be carried in various classes of vessels.
16	33	Periodical surveys—modified as to procedure.
17	8 and 42	<i>cf.</i> Carriage of certified masters and engineers.
18	20 and 21	Issue of local certificates of competency—modified as to particulars.
19	—	New. To prescribe the form of local certificates of competency.
20	—	New. To provide for replacement of lost, etc., local certificates of competency.
21	25	<i>cf.</i> Reports of arrivals.
22	26	<i>cf.</i> Notices of departures.
23	27	<i>cf.</i> Night clearances.
24 and 25	29	<i>cf.</i> Monthly clearances.
26	—	New. To provide for the maintenance of a crew book and for reporting of changes of crew members.
27	36 and 37	<i>cf.</i> Duty of owners on engagements and discharges of masters or engineers.
28	38	<i>cf.</i> Duty of masters and engineers on engagement or discharge.
29	40	<i>cf.</i> Record of engagements and discharges of masters and engineers to be maintained in Marine Department.
30-36	—	New. To make provision for appropriate control of pleasure launches.
37	11	<i>cf.</i> Painting of names and numbers for identification of vessels.
38	12	<i>cf.</i> General cleanliness and repair of vessels.
39	15 and 17	Modified to enable the Director from time to time to prescribe by Gazette notification maximum hire charges.
40	15A	<i>cf.</i> Refusal to take passengers on request.
41	18	<i>cf.</i> Scale of reduction in number of passengers when cargo is also carried.
42	19 (in part)	<i>cf.</i> As to prohibition of carriage of cargo on bridge deck. Reference to carriage of dangerous goods omitted as this is covered by other legislation.
43	47	<i>cf.</i> Disembarkation of passengers from launches.
44	48	<i>cf.</i> Embarkation and disembarkation of passengers from ferry vessels.
45	51	<i>cf.</i> Prohibition of prostitution.
46	52	<i>cf.</i> Control of launches at public piers.
47	46	<i>cf.</i> Prohibition of loitering.

<i>Regulation.</i>	<i>Corresponding provision of Table E.</i>	<i>Remarks.</i>
48	35	<i>cf.</i> Reports of accidents or damage.
49	—	New. Penalty for giving false information.
50	31	<i>cf.</i> Exemptions from requirements.
51	—	Revocation of Table E to the Merchant Shipping Ordinance 1899.

Note—Penalty provisions have been inserted where appropriate throughout the regulations in replacement of the penalties prescribed by s. 37(3) of the Merchant Shipping Ordinance 1899, subject to the maximum penalty being increased from a fine of \$500 to a fine of \$4,000 and six months imprisonment in certain cases.

(Secretariat GR17/3231/53)

MERCHANT SHIPPING (EXAMINATIONS) RULES 1965.

ARRANGEMENT OF RULES.

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MERCHANT SHIPPING ORDINANCE 1953.

(No. 14 of 1953).

MERCHANT SHIPPING (EXAMINATIONS) RULES 1965.

In exercise of the powers conferred by section 6 of the Merchant Shipping Ordinance 1953, the Governor in Council has made the following rules—

1. These rules may be cited as the Merchant Shipping (Examinations) Rules 1965, and shall come into operation on the day appointed for the commencement of the Merchant Shipping (Amendment) Ordinance 1965.

2. In these rules, unless the context otherwise requires—

“certificate of competency” means a certificate of competency as Master, Mate or Second Mate of a foreign-going steamship and as Trawling Master and Trawling Master (Limited);

“day of examination” means the day upon which any examination in question commences;

“examiner” means a person appointed to be an Examiner of Masters and Mates pursuant to the provisions of rule 3;

“fee” means the appropriate fee prescribed in the Merchant Shipping (Fees) Regulations 1965;

“foreign-going”, when used in relation to a certificate of competency, means a Certificate of Competency as Master, Mate or Second Mate of a foreign-going steamship;

“Minister” means the Minister of Transport;

“Principal Examiner” means the Principal Examiner of Masters and Mates appointed by the Minister.

3. The Governor may appoint any person, whom he considers sufficiently qualified, to be an Examiner of Masters and Mates.

4. (1) Every examination for a certificate of competency shall be held at the Marine Department on such days as shall be notified annually in the *Gazette*.

(2) Other examinations shall be held by arrangement with the Director.

5. (1) No application for any examination under these regulations will be accepted unless it is made on a form to be obtained by the applicant from the Director and submitted to an examiner together with the prescribed fee; and in the case of any application for examination for a certificate of competency as Master, Mate or Second Mate, unless it is submitted in duplicate.

Citation and commencement. (17 of 1965).

Interpretation.

(L.N. 86/65).

Appointment of examiners.

Holding of examinations.

Application for examination.

(2) No application for examination under these regulations will be accepted unless it is accompanied by such evidence as the Director may require regarding the applicant's qualification to sit for the examination in question in accordance with the rules set out in the appropriate Schedules.

Schedules.

(3) No applicant shall be admitted to any examination unless he satisfies the Director that he is qualified to be admitted thereto in accordance with the rules set out in the appropriate Schedules.

(4) No application for examination for any certificate of competency will be accepted unless it is submitted to an examiner not less than three days before the day of examination.

(5) No application for examination for a certificate of competency as Master or Mate will be accepted from any alien.

6. No candidate shall be eligible for examination for any certificate of competency, who—

Misconduct.

(a) has committed any offence punishable under section 7 of the Ordinance,

(b) has committed any offence punishable under the Prevention of Corruption Ordinance in relation to any examination for a certificate of competency or in relation to any such certificate, (Cap. 215).

(c) having signed articles, has neglected to join his ship or who, after joining, has deserted from his ship, or who has been found guilty by the master of any ship or by any other tribunal of gross misconduct on board such ship, or

(d) has been discharged from any ship with a certificate of discharge endorsed otherwise than “Very Good” in respect of both conduct and ability,

until the expiration of such period, not exceeding two years, as the Director shall think fit.

7. (1) No candidate shall be eligible for examination for any certificate of competency who is afflicted with deafness, impediment of speech or other physical or mental infirmity such as, in the opinion of the examiner conducting the examination in question, would render him incapable of adequately discharging the ordinary seagoing duties in respect of which the certificate is required, or who has not passed the appropriate sight tests prescribed in the Fifth Schedule.

Physical disability.

(2) If during the course of any examination for a certificate of competency the examiner is of the opinion that any candidate is afflicted in any manner specified in paragraph (1), he shall not permit such candidate to complete the examination.

Fifth Schedule.

(3) In any case in which the examiner does not permit any candidate to sit for or to complete any examination by virtue of the provisions of this rule, he shall, so soon as may be, report the facts to the Director and to the Minister.

Knowledge of English.

8. (1) No candidate shall be eligible for examination for any certificate of competency whose knowledge of the English language is, in the opinion of the examiner, insufficient to enable him to carry out adequately the ordinary duties to be performed in a British ship in respect of which the certificate is required.

(2) No candidate who is considered by the examiner to be ineligible for examination by virtue of paragraph (1), or who during the course of examination is found to be so ineligible, shall be permitted to sit again for examination until the expiration of six months.

Age and sea service.

(3) If for any reason, not being due to any fault of the candidate, any candidate is permitted to sit for examination for any certificate of competency without having performed the appropriate period of sea service prescribed in the Second Schedule and has passed the examination successfully, he may, in the discretion of the Director be exempted from sitting again for the examination after completion of the prescribed period of sea service.

Second Schedule.

(4) If in any case referred to in paragraph (3) where the Director requires that the candidate shall sit for re-examination after completion of the prescribed period of sea service, any fee paid in respect of such examination shall either be refunded to the candidate or, if he so requests, be held to his credit against re-examination.

Conduct of and syllabus for examinations.

Fifth, Sixth and Seventh Schedules.

9. (1) Every examination to which these regulations relate shall be conducted by an examiner in accordance with the rules contained in the Fifth and Sixth Schedules and shall be based upon the appropriate syllabus specified in the Seventh Schedule.

(2) Success or failure and the conditions relating to the partial passes in any examination shall be determined in the manner provided in the Eighth Schedule.

Eighth Schedule.

Issue of certificates of competency.

10. (1) If the candidate is successful the Director shall make application to the Governor for the issue of the appropriate certificate of competency accordingly.

(2) Every certificate of competency as Master, First Mate or Second Mate of a foreign-going steamship, or as Trawling Master (Limited) or Trawling Master, shall be issued in Form 1, 2, 3, 4 or 5, as appropriate, of the forms prescribed in the Ninth Schedule.

Ninth Schedule, Forms 1, 2, 3, 4 and 5.

(3) Every certificate of efficiency as Lifeboatman or competency in radar maintenance or observation shall be in Form 6, 7 or 8, as appropriate, of the forms prescribed in the Ninth Schedule.

Ninth Schedule, Forms 6, 7 and 8.

11. (1) Whenever a certificate of competency has been lost, destroyed or defaced, the holder thereof may apply to the Director for the issue to him of a certified copy thereof.

Certified copies of certificates of competency or service lost, etc.

(2) Except where the certificate referred to in paragraph (1) has been lost, destroyed or defaced by reason of shipwreck or fire, every application for a certified copy shall be accompanied by the prescribed fee.

12. If any person is in possession of a valid certificate of competency in a form other than the appropriate form prescribed in the Ninth Schedule, he may upon application to the Director and payment of the prescribed fee exchange such certificate for a corresponding certificate in the appropriate form prescribed in that Schedule.

Exchange of old type certificates of competency for current type. Ninth Schedule.

13. Where the holder of any certificate of competency is the recipient of any decoration or award, whether granted by Her Majesty or by any foreign power, or possesses any of the following qualifications, that is to say—

Endorsement of certificates of competency.

- (a) Postmaster-General's Certificate of Competency in Radiotelegraphy;
- (b) Approved Radar Maintenance Certificate;
- (c) Approved Radar Observer's Certificate;
- (d) Ministry of Transport Examination for a Sailing Ship Endorsement;
- (e) Compass Deviation Examination;
- (f) Special Signalling Examination.

the Director may, upon being satisfied that such decoration or award has been granted or that such qualification is held, endorse a note thereof upon the certificate of competency in question.

14. Any candidate who considers himself aggrieved by any decision of an examiner may request the Director to refer the matter to the Principal Examiner.

Appeal from decision of examiner.

15. (1) The Certificates of Competency (Masters and Mates) Rules (known as Table I) are revoked.

Revocation. [See Ord. No. 3 of 1962.]

(2) The Merchant Shipping (Certification of Trawling Masters) Rules 1960 are revoked.

(G.N.A. 81/60).

FIRST SCHEDULE.

[rule 5.]

FIRST AID CERTIFICATES.

The First Aid Certificates issued by the following authorities are deemed to be First Aid Certificates within the meaning of this Schedule—

- The St. John Ambulance Association.
- The St. Andrew's Ambulance Association.
- The British Red Cross Society.
- The London County Council.
- The Glamorgan County Council.
- The Leith Nautical College.
- The Kingston-upon-Hull Education Authority.
- The Grimsby Nautical College.
- A Senior Medical Officer of one of Her Majesty's Ships.
- Any other authority approved by the Minister.

Note: The Certificate must be an adult certificate, that is to say, a certificate obtained by a candidate of sixteen years of age or more and the qualifying examination or re-examination therefor must have been passed not more than three years before the day of examination for the Certificate to be considered a valid First Aid Certificate.

SECOND SCHEDULE.

[rules 5 & 8.]

QUALIFICATIONS FOR CERTIFICATES OF COMPETENCY.

1. *Certificate of Competency as Second Mate of a Foreign-going Steamship:*
 - (a) No candidate shall be admitted to the examination for or be granted a certificate of competency unless he has attained the age of twenty years (except as provided in paragraph 26 of Part I of the Fourth Schedule) and has served for not less than four years at sea in foreign-going ships or performed equivalent service as provided in the Fourth Schedule.
 - (b) No candidate shall be issued with a certificate of competency unless he possesses a Certificate of Proficiency as Radar Observer in Merchant Ships issued by a school specified in list E of Part II of the Fourth Schedule. The Certificate of Proficiency as Radar Observer shall have been obtained after completing a minimum of twenty-four months qualifying sea services reckoned in accordance with Part I of the Fourth Schedule. Subject to an overall maximum of eighteen months remission, a maximum period of one week will be allowed to count as qualifying sea service in respect of attendance at an approved Radar Observer course. Candidates may take the course after they have passed the examination for the certificate of competency in which case the remission of sea service may be anticipated.
 - (c) No candidate shall be admitted to examination for or be granted a certificate of competency unless he possesses a valid first aid certificate issued by one of the authorities specified in the First Schedule.
 - (d) No candidate shall be admitted to examination for or be granted a certificate of competency unless he has passed the appropriate sight test specified in the Fifth Schedule.

2. *Certificate of Competency as First Mate of a Foreign-going Steamship:*

- (a) No candidate shall be admitted to examination for or be granted a certificate of competency unless he has attained the age of twenty-one years and has served for not less than five years at sea in foreign-going ships or performed equivalent service as provided in the Fourth Schedule. This period of sea service must include not less than one year in a foreign-going ship in a capacity not lower than third of three watch-keeping officers whilst holding a certificate as Second Mate (foreign-going).
- (b) No candidate shall be admitted to examination for or be granted a certificate of competency unless he possesses a valid first aid certificate issued by one of the authorities specified in the First Schedule.
- (c) No candidate shall be admitted to examination for or be granted a certificate of competency unless he has passed the appropriate sight test specified in the Fifth Schedule.

3. *Certificate of Competency as Master of a Foreign-going Steamship:*

- (a) No candidate shall be admitted to examination for or be granted a certificate of competency unless he has attained the age of twenty-three years and has served for not less than seven years at sea in foreign-going ships or performed equivalent service as provided in the Fourth Schedule. This period of service must include—
 - (i) not less than two years in a foreign-going ship in a capacity not lower than third of three watch-keeping officers whilst holding a certificate not lower than Second Mate (foreign-going); and in addition
 - (ii) not less than eighteen months in a foreign-going ship in a capacity not lower than third of three watch-keeping officers whilst holding a certificate not lower than First Mate (foreign-going) or equivalent sea service as provided in paragraphs 10 and 11 of Part I of the Fourth Schedule.

(For interpretation of watch-keeping service see paragraph 14 of Part I of the Fourth Schedule).

- (b) No candidate shall be admitted to examination for or be granted a certificate of competency unless he possesses a valid first aid certificate issued by one of the authorities specified in the First Schedule.
- (c) No candidate shall be admitted to examination for or be granted a certificate of competency unless he has passed the appropriate sight test specified in the Fifth Schedule.

4. *Certificate of Competency as Trawling Master (Limited):*

- (a) No candidate shall be admitted to examination for or be granted a certificate of competency unless he has attained the age of twenty-one years and has served at sea in a deck rating for not less than four years of which not less than one year was served in trawlers.
- (b) No candidate shall be admitted to examination for or be granted a certificate of competency unless he possesses a valid first aid certificate issued by one of the authorities specified in the First Schedule.
- (c) No candidate shall be admitted to examination for or be granted a certificate of competency unless he has passed the appropriate sight test specified in the Fifth Schedule.

5. *Certificate of Competency as Trawling Master:*

- (a) No candidate shall be admitted to examination for or be granted a certificate of competency unless he has attained the age of twenty-one years and has served at sea in a deck rating for not less than five years of which not less than two years were served in trawlers.

- (b) No candidate shall be admitted to examination for or be granted a certificate of competency unless he possesses a valid first aid certificate issued by one of the authorities specified in the First Schedule.
- (c) No candidate shall be admitted to examination for or be granted a certificate of competency unless he has passed the appropriate sight test specified in the Fifth Schedule.

THIRD SCHEDULE.

[rule 5.]

OTHER EXAMINATIONS AND QUALIFICATIONS THEREFOR.

1. *Voluntary Examination in Compass Deviation.*

Any applicant who holds a foreign-going certificate of competency of any grade may undertake a voluntary examination in compass deviation. If the candidate passes the examination, his certificate of competency may be endorsed to that effect. In order to pass he must obtain seventy *per cent* of the aggregate marks. The syllabus of examination will be based on that of the Magnetism and Electricity paper of the Ministry of Transport Examination for Extra Master.

2. *Voluntary Examination in Signalling.*

Any applicant who holds, or has passed an examination for, or is a candidate for, a certificate of competency of any grade may undertake a voluntary examination in signalling.

No fee will be charged for this examination if it is taken when a candidate is also examined for a certificate of competency.

3. *Certificate for Maintenance of Radar Equipment on Merchant Ships.*

Any applicant who wishes to obtain a certificate that he has passed an examination in the maintenance of Radar equipment on board merchant ships may undertake a voluntary examination therefor. No qualifying sea service is necessary.

4. *Certificate of Efficiency as Lifeboatman.*

Any applicant who is over eighteen years of age and free from physical or other disability which would render him unfit to perform the duties of a lifeboatman may undertake a voluntary examination for a certificate of efficiency as lifeboatman.

The candidate must have had service at sea in any capacity on board a foreign-going merchant ship for a period of not less than six months.

Note: This examination can only be conducted provided there are sufficient candidates to form a reasonable boat's crew and proper facilities for conducting the examination are available. Only in exceptional cases can fewer than ten candidates be examined at any one time.

FOURTH SCHEDULE.

[rule 5.]

PART I.

RULES FOR ESTIMATING SEA SERVICE FOR FOREIGN-GOING CERTIFICATES OF COMPETENCY.

1. Qualifying sea service, except as hereinafter provided, must be performed in the Deck Department.

2. For the purpose of this Schedule, sea service is reckoned from the commencement of the voyage to its termination.

3. Certificates of discharge for service in the foreign trade will generally be accepted as proof of sea service, but certificates of discharge for service in a home or coasting trade will be sent for verification to the Registrar General of Shipping and Seamen or other appropriate authority.

4. Where service in charge of a watch is required, certificates of watch-keeping service must be produced.

5. For all certificates of competency as Master or Mate of any grade in the Merchant Navy, the qualifying service usually required is service performed in ordinary trading vessels. While this Schedule provides for the acceptance in part of certain kinds of non-trading service (*e.g.* that performed in fishing-boats, yachts, pilot vessels, etc.), non-trading service not specially provided for herein cannot be accepted as qualifying service without special sanction from the Principal Examiner.

6. The nature of service is determined by the actual position on board ship—sea service, in whatever trade it may be performed, shall not be regarded as qualifying for examination for certificates of competency, unless it can be verified by reference to the articles of the ship in which it was performed. (For example, service claimed by testimonial or otherwise to have been as Mate when the actual rating as shown by the articles was that of Boatswain, will not be accepted where service as officer is required.)

Service in Foreign-going Vessels.

7. Watch-keeping service performed in a ship on foreign-going articles will be accepted in full if the vessel has proceeded outside home trade limits during the course of the voyage.

8. Where a voyage has been made in the home trade limits as a preliminary to or at the finish of the foreign-going voyage, the home trade voyage shall be considered part of the foreign-going voyage for the purpose of calculating watch-keeping service in the case of officers who have served throughout.

9. Where the officer serves on the home trade voyage but does not serve on the foreign-going voyage, the home trade voyage shall be considered part of the foreign-going voyage for the purpose of calculating watch-keeping service, provided that the total allowance for such a voyage or voyages does not exceed an overall maximum of three months for First Mate or six months for Master.

Service with Added Responsibility.

10. Where watch-keeping service is required to be performed as equivalent to not lower than third of three watch-keeping officers in a foreign-going ship, such service may be performed in the foreign, home or coasting trade.

Candidates for certificates of competency as Masters (foreign-going) whose watch-keeping service is performed in a higher capacity than second or third watch-keeping officer whilst holding a First Mate's certificate shall have such service reckoned—

- (a) if as first watch-keeping officer next in seniority to the Master, at one and one half times actual service;
- (b) if as first watch-keeping officer not next in seniority to the Master, or as second of two watch-keeping officers, at one and one fifth times actual service.

Service in the United Kingdom Home and Coasting Trades.

11. The equivalent rates for service in the United Kingdom home or coasting trades for admission to examinations for certificates of competency (foreign-going) are as follows—

- (a) service in home trade vessels of 1,600 tons gross and over shall count in full;

- (b) service in vessels of 500 tons gross and over, but less than 1,600 tons gross, shall count in full where the most distant ports visited are at least 500 miles apart, but where the most distant ports are less than 500 miles apart, service will count at two-thirds rate;
- (c) service in vessels of less than 500 tons gross in the home trade shall count at two-thirds rate;
- (d) service in a capacity lower than First Watch-keeping Officer on regular runs between near neighbouring ports which take less than two watches will not be accepted for foreign-going certificates.

(Note: Candidates for certificates of competency as First Mate (foreign-going) or Master (foreign-going) must have actual foreign-going experience as prescribed in paragraph 2 and in paragraph 3(a) of the Second Schedule).

Service in Ships Trading Locally or Abroad.

12. Service in ships trading exclusively from Hong Kong or exclusively from any port outside the Colony may be accepted either in full or at two-thirds rate on the same basis as that for home or coasting trade in paragraph 11. Ships so employed will not normally be regarded as foreign-going ships unless the most distant ports visited are at least 500 miles apart.

Officer's Service.

13. Service as First Mate means service as the officer next in seniority to the Master. Service as junior or auxiliary First Mate or as First Mate under a "Chief Officer" will count for qualifying purposes as equivalent to service as the second of three watch-keeping officers if the more senior officer is a watch-keeper.

Watch-keeping Service.

14. Where watch-keeping service is required, candidates must prove by production of certificates that during the whole period claimed they have been in full charge, or in effective charge, of a watch for not less than eight hours out of every twenty-four hours service claimed.

15. "Effective charge of a watch" means responsibility for the watch, but does not preclude occasional supervision by a senior officer, provided that the senior officer does not at any time take charge of the watch. Where, however, the senior officer does take charge, the watch is doubled and the fact should be noted for entry in the certificate of watch-keeping service.

16. An officer who is the junior of two officers keeping doubled watches during a voyage may count towards the qualifying service for First Mate under paragraph 2 and for Master under paragraph 3(a)(i) of the Second Schedule two-thirds of the watch-keeping time so served:

Provided that the time so counted shall not exceed nine months.

17. The exact nature of a candidate's service must be clearly established by one or more certificates signed by the Master of the vessel or vessels in which the candidate's service was performed.

Service in Possession of Certificate.

18. Officer's service, to be recognized as qualifying service for purposes of examination, must be performed with the requisite certificate of competency. Officer's service performed by a candidate who has been duly promoted during the course of a voyage or who, as a result of service in vessels plying between ports abroad, has been unable to obtain the necessary certificates, may be accepted by the examiner, provided that it is satisfactory in other respects.

Promotion During Voyage.

19. Whenever a man has, from any cause in the course of the voyage, been regularly promoted from the rank in which he first shipped on the occurrence of a vacancy and such promotion, with the ground on which it has been made, has been entered in the articles and the Official Log Book, he will receive credit for his service in the higher grade for the period subsequent to his promotion.

Mixed Service.

20. Where a candidate has performed sea service in more than one capacity, or partly in the foreign trade and partly in a home or coasting trade, proportionate allowances will be made for each kind of service, provided that in other respects it complies with the requirements of the regulations.

Evidence as to Service in Foreign Vessels.

21. The testimonials of service of aliens and of British officers and seamen serving in foreign vessels, which cannot be verified by the Registrar General of Shipping and Seamen, nor by the Mercantile Marine Office, Hong Kong, must be confirmed either by the Consul or some other recognized official authority of the foreign country in question, or by the testimony of some responsible person having personal knowledge of the facts to be established. The production, however, of such proofs will not of necessity be deemed sufficient. Each case will be decided on its merits by the examiner or be referred to the Principal Examiner for determination.

Service as Carpenter, Sailmaker, Cook, Steward, etc.

22. Candidates whose service has been performed in capacities other than apprentice, midshipman, cadet, ordinary seaman or able seaman (e.g. men who have served as carpenter, or sailmaker, or as cook in small vessels where cooking is only a part of his duties) must satisfy the examiner that they have, during the whole time claimed, performed deck duties in addition to their own particular work. These facts may be established by the production of satisfactory certificates from the Masters under whom the candidate has served. Such service will only be accepted as equivalent to two-thirds of the time served as ordinary deck hand. In the absence of satisfactory evidence, the applicant will be required to perform additional service in the capacity of seaman. Service as cook (under conditions other than the above), or as steward, purser, or in the engine room, will not be accepted.

Service as Radio Officer.

23. If a candidate has been engaged on articles as a deck rating, and has served both as a deck rating and as a Radio Officer, two-thirds of such service may be counted as qualifying service. The candidate must, however, prove that during the whole period claimed, he performed deck duties in addition to the duties of a Radio Officer.

24. If a candidate has been engaged on articles as a Radio Officer, and has performed deck duties in addition, two-thirds of such service may be counted as qualifying service provided that the candidate can produce a certificate from the Master to the effect that he has performed deck duties throughout the voyage for a reasonable proportion of time each day and that he has not spent more than two hours a day on regular wireless watch.

25. If a candidate has been engaged on articles as a Radio Officer, and has only served as such, one-quarter of his service may be counted as qualifying service, up to a maximum of twelve months' qualifying service.

Apprentices, Cadets and Midshipmen.

26. Apprentices, cadets and midshipmen, whether bound by indentures or not, will be accepted for examination for a certificate of competency as Second Mate (foreign-going) after serving on board ship for not less than three quarters

of the period specified in paragraph 1(a) of the Second Schedule reduced by any remissions granted under paragraphs 28, 32, 33 and 34 of this Part of this Schedule and paragraph 1(b) of the Second Schedule provided that a letter from the Master or Owners is produced stating that their service was satisfactorily performed during their period on board ship. In no case will a candidate be admitted to examination until he has completed a minimum period of twenty-two and one half months on board ship. In the event of a candidate having completed the required period and being short of the necessary service on board ship, he will be required to show such additional sea service, either as a seaman or a junior officer, to make up the deficiency.

The concession provided by this paragraph does not apply to any case in which a vessel on which the candidate has served has been laid up in port for a large proportion of the period concerned. The proportion of the period which can be accepted as qualifying service in such a case depends on the individual circumstances thereof and each case will be considered on its merits. The examiners will make as generous an allowance for such service as they properly can having regard to the condition that candidates for certificates of competency must have sufficient experience of actual service at sea.

A candidate who has completed his qualifying service but has not reached the age of twenty years may sit the examination as soon as he has attained the age of nineteen and one half years, but if he is successful the certificate will not be issued until he reaches the age of twenty years.

Promotion During Apprentice or Cadet Service.

27. Where an apprentice, cadet or midshipman, whether bound by indentures or not, is promoted to uncertificated junior officer in the same company, for the last year of apprenticeship or cadetship, such officer's service will be treated, for the purposes of assessing sea service, as cadet or apprentice service.

Training Ships.

28. One half the time served after the age of fourteen years on board a training ship specified in list A in Part II of this Schedule shall count as qualifying sea service, provided that the candidate can produce a satisfactory certificate from the appropriate Committee or Captain Superintendent testifying to his good conduct and proficiency up to the time of leaving the ship, subject to the limit of time specified in that list in the case of each training ship and to the condition that the total remission of sea service in respect of attendance at training ships and schools shall not exceed twelve months. Training ship service will not be regarded as equivalent to service in square-rigged vessels.

29. Time spent after the age of fourteen years at a school for nautical training specified in Part II of this Schedule may count as service at sea in the proportion specified in that Part:

Provided that—

- (a) the candidate produces a satisfactory certificate as regards conduct and proficiency from the authorities of the school on leaving it; and
- (b) in the case of any school specified in list B or C in that Part the certificate shows whether or not the candidate completed the course, and in the case of any school specified in list C or D the certificate testifies in addition to the candidates continuous and regular attendance at all the approved classes, and in the case of any school specified in list D the certificate also states the total number of hours during which the candidate attended at the school.

30. A candidate who, at different times, has attended two or more schools of nautical training specified in Part II of this Schedule will be allowed a remission of sea service in respect of attendance at each of them, subject to the condition that the total remission of sea service in respect of attention at approved schools and training ships will not exceed twelve months.

31. Time spent at schools specified in Part II of this Schedule will not be accepted in lieu of any part of the officer's service required to qualify as candidate for examination for a certificate as First Mate or Master; nor in lieu of sea service required in consequence of failure in any oral examination.

Mid Apprenticeship Courses.

32. Time spent by a deck apprentice or cadet (whether indentured or un-indentured) at a fully residential course ashore at approximately the middle of his apprenticeship may attract a remission of sea service equal to the full period of residence up to a maximum of six months, provided that the total remission of sea service shall not exceed eighteen months. To qualify for remission the course must be recognized by the Minister.

A list of such schools is contained in list F of Part II of this Schedule.

Certificate of Education.

33. Candidates for certificates of competency as Second Mate may be granted a remission of nine months sea service if they have obtained the qualifications specified below, and provided they were in receipt of a full-time education up to the date of gaining the qualification.

- (a) In England passes in not less than five subjects in the General Certificate of Education, of which two, including either Mathematics or Physics must be at advanced level.
- (b) A Scottish Leaving Certificate (or from 1962 onwards, a Scottish Certificate of Education) with passes in not less than five subjects, of which at least three should be on the Higher grade; one of the Higher grade passes must be either in Mathematics or in Science (which must include Physics).
- (c) Passes in not less than five subjects in the Northern Ireland Grammar School Senior Certificate Examination, of which at least two, including either Mathematics or Physics, must be at advanced level.
- (d) Other qualifications which are accepted by the Ministry of Transport as being equivalent to (a), (b) or (c) above.
- (e) Passes in not less than five subjects in the Irish Republic School Leaving Certificate Examination of which at least two, including either Mathematics or Physics, must be at honour level.
- (f) Passes in not less than five subjects in the Matriculation Examination of the University of Hong Kong, of which at least two, including either Mathematics or Physics, must be passed at the advanced level.
- (g) Passes in not less than five subjects in the London University General Certificate of Education Examination held overseas, of which at least two, including either Mathematics or Physics, must be passed at the advanced level.

A candidate eligible for remission under this paragraph and also for remission by virtue of training in training ships or schools specified in Part II of this Schedule or in naval training colleges specified in paragraph 34 of this Part will be entitled to aggregate the remissions provided that the total remission of sea service does not exceed fifteen months.

A candidate who also attends a mid-apprenticeship release course referred to in paragraph 32, served in an approved cadet ship, or attends an approved senior course in navigation will gain a further three months remission.

Service in Naval Training Colleges.

34. Time spent at the Royal Naval College at Dartmouth or the Royal Australian Naval College or the National Defence Academy Khadatvasla will, subject to the conditions laid down in paragraph 29, be permitted to count as

equivalent to one-half of the same time spent in service at sea, and a similar allowance will be made in respect of time spent on courses on shore after promotion to Acting Sub-Lieutenant, subject to the condition that the total remission of sea service in respect of all time spent on shore shall not exceed twelve months. Time spent in shore training will not be accepted in lieu of watch-keeping service.

Service in the Royal Naval Reserve.

35. Sea-going and shore based service of officers of the Royal Naval Reserve with the Royal Navy will be allowed to count as qualifying watch-keeping service for certificates of competency as follows, subject to a maximum allowance of six months for each grade of certificate—

- (a) time spent by midshipmen on board sea-going vessels of the Royal Navy will, if accompanied by a good report, be accepted in full for the Second Mate's certificate, provided that a reasonable proportion of such time has been spent at sea and that not more than four weeks have been spent on leave;
- (b) time spent by officers (other than midshipman) up to and including the rank of Lieutenant when undergoing training with the Royal Navy will, subject to a good report, be accepted in full if sea-going service, or at half rate if shore based service, for the First Mate's or Master's certificate; and
- (c) service of officers appointed for temporary duty in the Fleet in lieu of Royal Naval officers, or of officers serving in the Fleet on mobilization or in a special emergency, will be accepted in full if sea-going, or at half rate if shore based, for the First Mate's or Master's certificate.

Experience in Service Aviation.

36. Officers with certificates as Second Mate or First Mate who hold short service commissions in the Royal Air Force will, subject to a good report, be allowed to count towards qualifying sea service for certificates of competency as First Mate or Master respectively, half the time spent under instruction in aviation at a flying training school or with a home defence unit, and half the time spent in a Fleet Air Arm or Naval Co-operation Unit, up to a maximum of six months in all for each grade of certificate.

37. Apprentices and seamen holding short service commissions in the Royal Air Force will, subject to a good report, be allowed to count towards qualifying sea service for a Second Mate's certificate half the time spent under instruction in aviation at a flying training school or with a home defence unit and half the time spent in a Fleet Air Arm or Naval Co-operation Unit, up to a maximum of six months in all, provided that the total remission of sea service in respect of Royal Air Force service and time spent in a shore training ship or school shall not in any event exceed twelve months.

Excursion Steamers.

38. In the case of excursion steamers, only such service as can be proved to have been performed at sea will be accepted.

Service in Fishing or Pilot Vessels.

39. Service performed exclusively in trawlers and other deep sea fishing vessels or in pilot vessels will count at two-thirds rate towards qualifying for a certificate of competency as Second Mate. In addition to such service in trawlers or in pilot vessels, a candidate must prove at least eighteen months' service in ordinary trading vessels in the foreign, home or coasting trades.

Service in Yachts.

40. Service in pleasure yachts will be accepted as qualifying service under the following conditions—

- (a) It must always be verified by satisfactory proofs, which must set out clearly and in detail the nature and duration of the service claimed. Only actual sea service will be accepted and service in harbour or port will not be accepted.
- (b) Service in foreign-going yachts will be accepted in full. Service performed within home trade limits in sailing yachts of not less than 50 tons net register or in steam yachts of not less than 80 tons gross register will be accepted in the proportion stated in paragraph 11, but candidates must also show service for not less than eighteen months in an ordinary trading vessel in the foreign trade. The cases of candidates for higher grade certificates will be dealt with on their merits.
- (c) Service within home trade limits in sailing yachts of not less than 20 tons net register or in steam yachts of not less than 40 tons gross register will be accepted towards qualifying a candidate for a foreign-going certificate as equivalent to half the same time served in the foreign trade, but no amount of such service shall count as more than two years' service in the foreign trade, and no such service shall count as officer service to qualify candidates for foreign-going certificates.
- (d) Service within home trade limits in sailing yachts of less than 20 tons net register or in steam yachts of less than 40 tons gross register will not be accepted as qualifying service for any class of certificate.

Service in Tugs, Royal Army Service Corps Vessels, etc.

41. Service performed in foreign-going tugs will be accepted in full (subject to the provisions of paragraph 12) for the purpose of qualifying a candidate for a foreign-going certificate on the following conditions—

- (a) that, of the qualifying service for a Second Mate's certificate, at least one year must have been served in ordinary trading ships in the foreign, home or coasting trade;
- (b) that, of the qualifying service performed between the Second Mate's and Master's examinations, at least one year must have been served in a qualifying capacity in an ordinary trading vessel in the foreign-going trade of which the equivalent of six months' foreign-going service must have been performed before qualifying for examination as First Mate.

42. Service performed in Royal Army Service Corps vessels employed outside partially smooth water limits will not be accepted towards qualifying a candidate for a foreign-going certificate, except in exceptional circumstances, when the case, together with all the candidate's papers, will be submitted to the Principal Examiner for determination by him.

Service in Dredgers.

43. Service in steam hopper barges will not count as service towards qualifying a candidate for a foreign-going certificate of competency.

Service on Rivers.

44. Service performed on rivers, no matter of what size, and service performed entirely within smooth or partially smooth water limits will not be accepted as sea service.

In doubtful cases, the candidate must, before the acceptance of the service can be considered, produce a certificate from the Master or Owner of the vessel in which the service was performed.

Service in Cable Ships or Royal Fleet Auxiliaries.

45. A candidate, part of whose qualifying service has been performed in cable ships or Royal Auxiliaries (other than freighting tankers) will be required to produce, in addition to the usual evidence of sea service, a statement or certificate from the owners of the ship showing the amount of time actually spent at sea. If the time so spent constitutes or exceeds two-thirds of the total time on articles, this total time will be accepted in full as qualifying service, but in the event of the actual sea service falling below this proportion, the time deficiency must be made up by additional service at sea before the total time on articles will be accepted in full as qualifying sea service.

Lighthouse Tenders, etc.

46. Service performed in the sea-going steam vessels of Trinity House, of the Commissioners of Northern Lighthouses, or of the Commissioners of Irish Lights or in Irish and Scottish Fishery Cruisers will be accepted as sea service in the same manner as service in the home or coasting trades as laid down in paragraph 11. A candidate must show in addition to such service at least twelve months in an ordinary trading vessel for each grade of certificate.

Service in Lightships.

47. Service in lightships will not be accepted as sea service.

Interpretation of type of Service.

48. Service in one type of vessel may be considered as service in another type if it appears to the examiner to be more directed to the individual case.

PART II.

LIST OF TRAINING SHIPS AND SCHOOLS OF NAUTICAL TRAINING.

A. *Training Ships Qualifying for Remission of Sea Service under paragraph 28.*

H.M.S. "Worcester"
T.S. "Dufferin"
T.S. "Mercury"

Half time to count up to a maximum of twelve months.

T.S. "Arethusa"

Half time to count up to a maximum of six months.

B. *Approved Residential Schools on Shore Qualifying for Remission of Sea Service under paragraph 29.*

<i>School</i>	<i>Remission</i>
Elgin : Gordonstoun School, Elgin, Morayshire.	} Half time to count up to a maximum of twelve months.
Liverpool : The H.M.S. "Conway" Merchant Navy Cadet School, Nautilus House, 6, Rumford Place, Liverpool, 3.	
Pangbourne : Nautical College, Pangbourne, Berks.	

	<i>School</i>	<i>Remission</i>
Cardiff	: Reardon Smith Nautical College, Plasmawr Road, Fairwater, Cardiff.	Half time to count up to a maximum of nine months.
Liverpool	: Indefatigable and National Sea Training School for Boys, Liverpool.	Half time to count up to a maximum of six months.
Southampton	: School of Navigation, University of Southampton, Warsash, Southampton.	Full time to count up to a maximum of nine months.

C. *Cadet Courses at Technical Schools Qualifying for Remission of Sea Service under paragraph 29.*

Aberdeen	: Robert Gordon's Technical College, School Hill, Aberdeen.
Belfast	: City of Belfast College of Technology, Belfast.
Bristol	: Bristol Technical College, School of Navigation, Ashley Down, Bristol 7.
Dundee	: Technical College, Bell Street, Dundee.
Fleetwood	: Fleetwood Navigation School, Station Road, Fleetwood.
Hull	: Kingston-upon-Hull High School for Nautical Training, Boulevard, Hull; Kingston-upon-Hull Nautical College, Boulevard, Hull; Trinity House Navigation Schools, Trinity House Lane, Hull.
Glasgow	: Royal College of Science and Technology, George Street, Glasgow.
Greenock	: Watt Memorial School, Dalrymple Street, Greenock.
Grimsby	: College of Further Education, Grimsby.
Leith	: Leith Nautical College, Commercial Street, Leith.
Liverpool	: City of Liverpool College of Technology, Nautical College Department, Clarence Street, Liverpool, 3.
London	: King Edward VII Nautical College, 680, Commercial Road, E. 14; London Nautical School (Rotherhithe), Broadwall, Blackfriars, S.E. 1.

Note: An additional two weeks is allowed for each term in residence in the case of King Edward VII Nautical College.

Plymouth	: Plymouth and Devonport Technical College, School of Navigation, The Technical College, Tavistock Road, Plymouth.
Rimouski	: Rimouski Merchant Marine Institute, 25, Saint Louis Street, Rimouski, Port Québec, Canada.
South Shields	: South Shields Marine and Technical College, Westoe, South Shields.
Stornoway	: Lewis Castle College, Stornoway, Isle of Lewis.
Singapore	: Singapore Polytechnic, Nautical Dept., Prince Edward Road, Singapore 2.

Half time to count in each case up to a maximum allowance of six months.

D. *Senior Courses in Navigation Qualifying for Remission of Sea Service under paragraph 29.*

Aberdeen	: Robert Gordon's Technical College, School Hill, Aberdeen.
Auckland	: School of Navigation, Ferry Building, Auckland, C.1, New Zealand.

Belfast	: City of Belfast College of Technology, Belfast.
Bombay	: Nautical and Engineering College, Waudby Road, Bombay.
Bristol	: College of Technology, Bristol.
Cardiff	: Welsh College of Advanced Technology, Cathays Park, Cardiff.
Dun Loaghaire	: Irish Nautical College Dun Loaghaire Co. Dublin, Irish Republic.
Dundee	: Dundee Technical College, Bell Street, Dundee.
Fleetwood	: Fleetwood Navigation School, Station Road, Fleetwood.
Glasgow	: Royal College of Science and Technology, George Street, Glasgow.
Greenock	: Watt Memorial School, Dalrymple Street, Greenock.
Hull	: Kingston-upon-Hull Nautical College, Boulevard, Hull; Trinity House Navigation Schools, Hull.
Leith	: Leith Nautical College, Commercial Street, Leith.
Liverpool	: Liverpool Technical College, Central Technical School, Byrom Street, Liverpool.
London	: King Edward VII Nautical College, 680, Commercial Road, E. 1.
Melbourne	: Royal Melbourne Technical College, Victoria, Australia.
Plymouth	: Plymouth and Devonport Technical College, School of Navigation, The Technical College, Tavistock Road, Plymouth.
Southampton	: School of Navigation, University of Southampton, Warsash, Southampton.
South Shields	: South Shields Marine and Technical College, Westoe, South Shields.
Sydney	: Sydney Technical College School of Navigation, N.S.W., Australia.
Wellington	: School of Navigation, Ford Building, Courtenay Place, Wellington, C. 3, New Zealand.

Half time to count in each case up to a maximum allowance of three months.

E. Schools at which Courses Leading to the Issue of Radar Observer Certificates are Held, Qualifying for Remission of Sea Service.

Aberdeen	: Robert Gordon's Technical College, Aberdeen.
Auckland	: School of Navigation, Marine Department, Ferry Building, Auckland, C.1, New Zealand.
Belfast	: City of Belfast College of Technology, Belfast.
Bombay	: Nautical and Engineering College, Waudby Road, Bombay.
Bristol	: Bristol Technical College School of Navigation Ashley Down, Bristol 7.
Cardiff	: Welsh College of Advanced Technology, Cathays Park, Cardiff.
Dun Loaghaire	: Irish Nautical College, Dun Loaghaire Co. Dublin, Irish Republic.
Fleetwood	: Fleetwood Navigation School, Orient Building, Fleetwood.
Glasgow	: School of Navigation, Royal College of Science and Technology, George Street, Glasgow.
Grimsby	: Nautical Department, Grimsby College of Further Education, Orwell Street, Grimsby.

Hong Kong	: Hong Kong Technical College, Hung Hom, Kowloon, Hong Kong.
Hull	: Kingston-upon-Hull Nautical College, Boulevard, Hull.
Karachi	: Navigation and Direction School, P.N.S. "Himalaya".
Leith	: Leith Nautical College, Commercial Street, Leith.
Liverpool	: City of Liverpool College of Technology, Nautical College Department, Clarence Street, Liverpool, 3.
London	: Sir John Cass College, Jewry Street, London, E.C. 3.
Melbourne	: School of Navigation, Royal Melbourne Technical College, Melbourne, Victoria.
Penang M.L.	: "Tanjung Merang".
Plymouth	: Plymouth and Devonport Technical College, School of Navigation, The Technical College, Tavistock Road, Plymouth.
Singapore	: Polytechnic Institution, Singapore.
Southampton	: School of Navigation, University of Southampton, Warsash, Southampton.
South Shields	: South Shields Marine and Technical College, Westoe, South Shields.
Sydney	: H.M.A.S. "Watson", Sydney, New South Wales, Australia.

A maximum period of one week to count up to an overall maximum remission of twelve months.

F. Approved Residential Schools Ashore Qualifying for a Remission of Sea Service under paragraph 32.

Plymouth	: Plymouth College of Technology, School of Navigation, Tavistock Road, Plymouth.
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FIFTH SCHEDULE.

[rules 7 & 9.]

SIGHT TESTS.

Introductory.

1. The purpose of these tests is to ensure that the candidate's eyesight is sufficiently good to enable him to pick up and identify correctly the lights of distant ships at sea. Experience has shown that for this purpose he must be able to reach certain minimum standards both of form and colour vision.

2. The tests employed are two, a letter test and a lantern test. The letter test is a test of form vision only, and the lantern test is a test of form and colour vision combined.

3. The tests will be conducted under the personal supervision of an examiner, who will keep a record of all mistakes made by the candidate both in the letter test and in the lantern test.

4. A candidate who holds any certificate of competency will not again be required to be examined in the lantern test.

5. During the examination in the sight tests candidates will not be allowed to use spectacles, contact lenses, or glasses of any kind or any other artificial aid to vision. They will, however, have the option of using either eye separately or both eyes together.

I—Letter Test.

Letter test.

1. The first test which the candidate is required to undergo is the letter test conducted on Snellen's principle by means of sheets of letters. Each sheet contains 7 lines, the 5th, 6th and 7th lines corresponding to standards 5/10, 5/7.5 and 5/5 respectively.

Standard of vision required.

2. With the exceptions indicated below every candidate will be required to read correctly five of the six letters in the sixth line and four of the seven letters in the seventh line, at a distance of 16 feet from the eye.

Method of testing.

3. Artificial illumination will be used. The test sheets will be hung on a wall at a height of five or six feet from the floor, with electric fluorescent strip lighting placed horizontally and suitably screened so that the light falls directly on two lines of letters on the sheet.

The test room will be moderately illuminated and care taken that there are no glaring lights or bright objects in the candidate's field of vision. Extreme contrast between the illuminated test card and the background will be avoided.

When the candidate has taken up the correct position one of the sheets will be exposed, and he will be asked to read the letters on the sheet from left to right, beginning at the top and going downwards.

If at the conclusion of the test the candidate is found to reach the required standard, he will be considered to have passed and will then proceed to the lantern test unless he holds a certificate of competency.

Failure.

4. If the candidate fails to reach the standard required on the first sheet he will be tested with at least four sheets and the following alternatives explained to him—

- (a) he may break off the examination and present himself for re-examination in not less than three months in which case a certificate of failure will be issued to him; or
- (b) he may proceed to the lantern test. In this case a record of all mistakes made in the letter test and all mistakes, if any, made in the lantern test will be referred to the Examining Board (see paragraph 13) who will decide whether the candidate has passed or failed in form vision.

Note: Failure to pass the letter test is due to some defect in form vision, which is sometimes curable. Whenever, therefore, a candidate fails to pass this test he will be advised to consult an ophthalmic surgeon with a view to ascertaining the nature of the defect in his form vision, and whether it is curable.

Lower Standard required in certain cases.

5. Candidates who are in possession of certificates of competency obtained before 1st January, 1914, may be regarded as passing the letter test if they can read correctly with either eye or both eyes together 3 of the 5 letters on the fifth line of a test sheet.

Prevention of deception.

6. Care will be taken by varying the order of the test sheets and by every other means to guard against the possibility of any deception on the part of the candidate.

II—Lantern Test.

Apparatus.

7. A lantern provided by the Ministry of Transport and a mirror are used for this test. The test is conducted in a room so darkened as to exclude all daylight. The lantern will be placed directly in front of the mirror, so that the front part of the lantern is exactly ten feet from the mirror, and in such a position that the lights reflected in the mirror show clearly when viewed by the candidate on the left of the lantern.

8. If a candidate makes mistakes at the beginning of the lantern test he will be kept in a completely or partially darkened room for at least a quarter of an hour and will then begin the test again.

Darkness Adaptation.

9. The lantern supplied for the examination is so constructed as to allow one large or two small lights to be visible, and is fitted with 12 glasses of three colours—red, white and green. At the beginning of the examination the candidate will be shown a series of lights through the large aperture, and he will be required to name the colours as they appear. Care will be taken in showing the white light to emphasize the fact that this light is not a pure white. If a candidate makes a mistake of calling this light "red", a proper red light will be shown immediately after and his attention directed to the difference between the two.

Method of testing.

After a series of lights through the large aperture has been shown, two complete circuits and one broken circuit with the two small apertures will be made, the candidate naming the colours of each set of two lights from left to right.

10. (1) If a candidate does not make any mistake in the lantern test after passing the letter test he will be deemed to have passed the whole examination and the examiner will issue a certificate to that effect.

Pass or failure.

(2) If, with either the large aperture or the two smaller apertures of the lantern, a candidate mistakes red for green or green for red, he will be considered to have failed in the lantern test.

(3) If a candidate makes any other mistake in this test, that is to say, if he calls white "red" or red "white", or confuses green and white, his case will be referred to the Examining Board, and he will be told that the decision as to whether he is passed or failed, or must undergo a further examination, will be communicated to him in due course. Pending the receipt of instructions from the Examining Board, a candidate for a certificate of competency will only be allowed to proceed with such examination on the express understanding that the latter examination will be cancelled in the event of failure in the sight tests.

(4) Candidates will be notified on an appropriate form of their success or failure or else that their case has been referred for further consideration. A pass certificate in the sight test remains valid for three months from the date of the tests.

III—Further Examinations and Appeals.

11. If in any case the Examining Board decides that a further examination is necessary before a candidate can be passed or failed, the candidate will be informed of the date and time of the examination. No additional fee will be charged for this further examination.

Further examination: referred cases.

12. A candidate who is adjudged by the Examiner to have failed the lantern test, and who is not referred for further examination (see paragraph 10(3)), may appeal to the Director for a special examination, on payment of the prescribed fee, which will be returned to him if he passes.

Special examination: appeal cases.

13. The further and special examinations will be conducted by an examiner, together with the Government's specialist adviser on eyesight.

Examining Board.

14. Candidates who are referred for further examination, or who appeal from the result of the lantern test, are notified by the Director or the Government Ophthalmic Specialist of the time at which they should attend for special examination. They are expected to inform the Director whether or not they will be able to attend at that time. Any candidate who, after informing the Director that he will attend, fails to appear at the time appointed, will be liable to have his examination postponed indefinitely, and also if an appeal candidate, will forfeit the appeal fee referred to in paragraph 12 and will be required to deposit a further fee of the same amount before further arrangement can be made for his special examination.

Punctual attendance at further and appeal examinations.

Final appeals.

15. Where, during the course of a special examination, a candidate who has been referred or who has appealed, is found to have a permanent defect in his eyesight such as to render him unfit for a sea career, he will be finally rejected and will not be allowed to be examined again in the sight tests on any future occasion. If the candidate is, however, still dissatisfied, he may, if he so desires, present himself for a second special examination on payment of the prescribed fee, provided that he brings with him a person to witness the examination and such person may be an ophthalmic surgeon. The special examination will be conducted by the Examining Board and the fee will not be returnable unless, in special circumstances, the Director sees fit to refund it. In no case will this fee be refunded to candidates under 14 years of age.

Candidates not finally rejected at a special examination.

16. In certain cases a candidate may not be finally rejected at a first special examination. Such candidate will have the option of taking a second special examination as provided by paragraph 15 or of being specially re-examined after an interval of three months on payment of the appropriate fee. If he is successful this fee will be refunded.

Duration of validity of sight tests.

17. The sight test certificate is valid for three calendar months irrespective of the number of attempts a candidate may make to pass the examination for a certificate of competency within that period. The sight test fee paid will be deducted from the fee payable on the first attempt only at the examination for the certificate of competency. Subsequent attempts to pass the examinations or part examination within the period of three months will be charged at the normal examination fee.

SIXTH SCHEDULE.

[rule 9.]

RULES CONCERNING THE CONDUCT OF EXAMINATIONS FOR CERTIFICATES OF COMPETENCY.

Times of examinations.

1. The examinations will begin each day at a time appointed by the examiner. A luncheon interval will be given each day generally between 1 p.m. to 2 p.m. As far as possible, candidates will be given ample notice of the day and time of oral examinations.

Punctuality.

2. Candidates must appear punctually at the examination room at the time appointed.

Strangers not admitted.

3. No person other than those whose duties require them to be present will be allowed in the room during the examination. Instructors will not be allowed in the building in which the examination is conducted during the conduct thereof.

Loose papers and books.

4. Before the examination begins, the tables or desks will be cleared of all scraps of paper and books other than those permitted in the examination room.

Use of books and tables.

5. (1) The following tables and books will be supplied at the examination room—

Nautical Tables (including logarithm tables), *i.e.* Norie (full edition), Burtons. Alt-Azimuth Tables—Burdwood, Davis. Admiralty Tide Tables—European and Pacific Ocean. Nautical Almanac—Abridged Edition.

(2) Candidates who wish to use tables other than the above may bring such tables into the examination room, on condition that they submit them to the examiner for scrutiny and approval before the examination begins. These tables must contain no manuscript notes. Subject to the examiner's approval, no restriction will be placed on the use of any tables, but candidates must understand the theory on which the tables are based, and such tables must be capable of

giving an answer within the limits of accuracy required to pass the examination. When tables other than those supplied are used in answering a question, the name of the tables and a note of what is actually obtained from them must be stated on the candidate's answer paper.

6. All instruments necessary for use in the examinations are supplied, but candidates will be allowed to use their own drawing instruments and slide rules provided that the examiner's approval is obtained before the examination begins. If a slide rule is used, a note to this effect should be entered on the candidate's answer paper.

Use of instruments.

7. (1) Candidates are forbidden to bring books or papers of any kind whatever, other than nautical tables, into the examination room. If this regulation is infringed, the offender will be regarded as having failed and will not be admitted to re-examination for a period of three months.

Prohibition of unauthorized books and papers.

(2) A candidate who uses his own nautical tables or instruments without first obtaining the permission of the examiner will be regarded as having failed and will not be admitted to re-examination for a period of three months.

8. If in the opinion of the examiner, a candidate intentionally defaces, blots, writes in, or otherwise injures any book or form or damages any instrument belonging to the examination room, his papers will be retained until he has replaced the damaged book, document or instrument. He will not be allowed to remove the damaged book or document or instrument, and he will be regarded as having failed.

Injury to books, instruments, etc.

9. No candidate may leave the examination room without permission and without giving up the paper on which he is engaged. Under no circumstances will a candidate be allowed to leave the building while the examination is proceeding. A candidate who breaks this rule will be regarded as having failed the examination.

Leaving room or building.

10. Silence must be kept in the examination room.

Silence.

11. (1) No candidate will be allowed to work out his problems on waste paper, or to write on the blotting paper supplied for his use in the examination. A candidate who breaks this rule will be regarded as having failed the examination.

All work to be shown.

(2) A sheet of blotting paper will be issued to each candidate with the first examination paper, and it must be returned each day to the examiner when the last paper is completed. The examiner will be careful to see that the blotting paper has not been used by the candidate in solving his problems, or for conveying information to other candidates. All work, except sketches, must be in ink.

12. (1) In the event of any candidate being discovered referring to any unauthorized book or paper, or copying from another, or accepting assistance or information from another, or affording any assistance or giving any information to another, or communicating in any way with another, during the time of examination, or copying any part of the problems, for the purpose of taking them out of the examination rooms, he will be regarded as having failed, and will not be admitted to re-examination for a period of six months.

Penalty for copying, etc.

(2) A candidate guilty of a second offence of a kind referred to in subparagraph (1) will not be admitted to re-examination until twelve months have elapsed.

13. Any candidate violating any of these rules, or being guilty of insolence to the examiner, or of disorderly or improper conduct in or about the examination room, will render himself liable to the postponement of his examination, or, if he has passed, to the detention of his certificate for such period as the Director may think fit.

Penalty for breach of rules.

SEVENTH SCHEDULE.

[rule 9.]

SYLLABUSES.

PART I.

GENERAL.

1. The syllabuses for the various grades of certificate are set out in this Schedule.
2. In each paper questions may be set combining one or more paragraphs.
3. The syllabus for a higher grade in both written and oral examinations includes the syllabus of that subject (if any) for certificates of lower grades.

SECOND MATE (FOREIGN-GOING).

4. A candidate should demonstrate his understanding of his work by means of sketches drawn with reasonable accuracy. Answers to problems in practical navigation should, where appropriate, be accompanied by a figure drawn reasonably to scale.
5. In the paper on practical navigation, total correction of altitudes by means of tables may be used. In the paper on "Principles of Navigation" each correction must be shown separately.
6. The papers on "Principles of Navigation" and "Mathematics" are intended to test the candidate's grasp of fundamental technical ideas and processes required in his work at sea. Mathematical proofs of formulae are not required.
7. Paper 1. (written).

General Ship Knowledge. (3 hours).

- (1) The names of the principal parts of a ship. General ideas on ship construction. The candidate will be expected to show his practical acquaintance with longitudinal and transverse framing, beams and beam knees, watertight bulkheads, hatchways, rudders and steering gear, shell plating, double bottoms and bilges, stern frame, propeller and propeller shaft, stern tube, sounding pipes, air pipes and general pumping arrangements. The stiffening and strengthening to resist panting and pounding. Cause and prevention of corrosion in a ship's structure.
- (2) The meaning of the terms Block Coefficient, Displacement and Dead-weight. Use of Displacement and Tons per inch scales to determine weights of cargo, etc. from draughts. Effect of density of water on draught. Fresh water allowance. The laws of floating bodies. The meaning of the terms Buoyancy and Reserve Buoyancy. General understanding of Centre of Gravity and Centre of Buoyancy and the effect of adding or removing weights. Metacentric height. The danger of slack ballast tanks.
- (3) Rigging a ship for loading and discharging cargo and the use of derricks and winches. The stowage and dunnaging of cargoes including bulk cargoes. Protection against damage by sweat. Bulk oil cargoes. Calculations of capacities taken up by part cargoes and of space remaining. Conversion of weight measurement of cargo into space measurement and *vice versa*. Elementary ideas on the making and use of cargo plan. Ventilation systems of holds and tanks.
- (4) The names and functions of various parts of a ship's lifeboat. The types of construction. Capacity, buoyancy and number of persons. Care and maintenance of lifeboat equipment, lifebuoys, lifejackets, line throwing appliances, fire appliances, lights and sound signals.

8. Paper 2. (written).

Chartwork and Pilotage. (2 hours).

- (1) Given the Variation and a table of Deviations to convert True Courses into Magnetic and Compass Courses and *Vice Versa*. To find the compass course and distance between two positions. The effect of current on speed. Allowance for leeway. Given compass course steered, the speed of the ship and the direction and rate of the current to find the true course made good. To find the course to steer allowing for a current.
- (2) To fix the ship's position on a chart by simultaneous cross bearings, bearing and range, or by wireless cross bearings applying the necessary corrections. To fix the ship's position by bearings of one or more objects with the run between, allowing for a current and to find the distance at which the ship will pass a given point. To fix the ship's position by horizontal sextant angles.
- (3) The use of clearing marks and horizontal and vertical danger angles.
- (4) To find the time and height of high and low water at a Standard Port (Admiralty Tide Tables). The use of tables or diagram to find the height of tide at any given time and thence the approximate correction to be applied to soundings or to charted heights of shore objects.
- (5) Candidates will be examined orally on the information given on a chart or plan, particularly about buoys, lights, depths and nature of bottom, contour lines, tides and tidal streams. Recognition of the coast. The intelligent use of Sailing Directions. Chart correction.

9. Paper 3. (written).

Practical Navigation. (3 hours).

- (1) Practical problems on Plane, Parallel, and Mercator Sailing.
- (2) The use of the Traverse Tables to obtain the position of the ship at any time given compass course and errors and the run recorded by log or calculated by time and estimated speed, allowing for the effects of wind and current, if any.
- (3) To find the latitude by Meridian Altitude of the Sun or a Star. Latitude by an observation of Polaris.
- (4) From an observation of the Sun or Star near the meridian to find the position line and the latitude through which it passes in a given longitude.
- (5) To determine the position line and a position through which it passes from an observation of the Sun or a Star out of the Meridian.
- (6) To find the ship's position at the time of the second observation by the use of position lines obtained from two different observations and thence the noon position if required.
- (7) To find the True Bearing of the Sun or a Star and the deviation of the compass for the direction of ship's head.

10. Paper 4. (written).

Mathematics. (2 hours).

- (1) Algebra. Addition, Subtraction, Multiplication, Division, Law of Indices, Insertion and removal of brackets. Simple equations—problems. Development of Formulae, transposition and evaluation. Simultaneous equations of the first order involving two unknowns—problems. Simple Factors. Fractions. The solution of the Quadratic Equation. Graphs. Axes of reference. Coordinates. Construction and reading of graphical diagrams, e.g. weather statistics and displacement curves. Problems on graphs. The ideas of ratio, proportion and variation and the application to simple problems.
- (2) Common Logarithms. The practical use of logarithms to base 10; their use in simple calculations involving multiplication, division, simple powers and roots.

(3) Mensuration. Areas and perimeters of rectangle, triangle and circle. Volumes and surface areas of box shaped bodies, cylinders, wedges and spheres. Practical applications, e.g. weight of general cargo of various shapes; volumes of holds, bunkers and tanks; weight of contents.

(4) Practical Geometry. The construction of plane triangles. Congruence of triangles. The right-angled triangle. Exterior angle equal to the sum of the interior opposite angles. Sum of angles in a triangle. Similar triangles and ratio of corresponding sides. Parallel lines and transversal. Properties of circles, chords and tangents. Angle in a semicircle; angles subtended by any chord of a circle. Forces, resultant forces and their components. The vector diagram.

(5) Trigonometry. Measurement of angles. Circular measure. Trigonometrical rates up to one complete revolution. Haversine. Simple relationship between ratios. Complementary and supplementary angles and their ratios. Simple Identities. Solution of right-angled and oblique-angled triangles including practical problems based thereon. The use of the Traverse Tables for solution of right-angled triangles. Elementary properties of spherical triangles. Solution of spherical triangles (given three sides or two sides and the included angle). Solution of right-angled and quadrantal spherical triangles.

11. Paper 5. (written).

Principles of Navigation. (2 hours).

(In this paper candidates may be asked to draw a figure reasonably to scale and to state the projection used.)

Candidates will be required to have a general understanding of the following—

(1) The shape of the Earth. Poles. Equator. Meridians. Parallels of Latitude. The position of a place fixed by its latitude and longitude. Direction, bearing, distance, units of measurement. Difference of latitude, difference of longitude, departure, middle latitude and meridional difference of latitude and the relationships between them. Great and small circles on a sphere. Shortest distance on the surface of a sphere between two points.

(2) The celestial sphere, celestial poles, celestial meridian above and below poles, celestial equator, celestial horizon, zenith, prime vertical, circles of altitude.

(3) Solar system. The movement of the Earth and other heavenly bodies. Mean Sun. Ecliptic. First Point of Aries. Declination. Right Ascension. Azimuth. Rising and setting of heavenly bodies. Length of day and night. Twilight. The position of a heavenly body on the celestial sphere both with and without reference to the observer, *i.e.* Azimuth with Altitude or Declination with Right Ascension. Recognition of stars of the 1st Magnitude by reference to the Principal Constellations.

(4) Time, Greenwich and other Standard times. Mean time. Apparent time. Sidereal time. Equation of time. Relationship between longitude and time.

(5) Hour Angle of a heavenly body in time and in arc. Greenwich Hour Angle of Sun, Moon, Planets and Aries. Sidereal Hour Angle of a Star.

(6) Correction of Sextant altitudes. Dip, Refraction, Horizontal Parallax. Parallax in Altitude, Semi Diameter and augmentation.

(7) Geographical position of a heavy body. A circle of position on the earth and its practical application, *i.e.* position line. Intercept.

(8) Magnetic Meridian. Variation and Deviation.

(9) The simple properties of a Mercator Chart. Longitude and Latitude scales. The measurement of distance. Rhumb Lines. Meridional Parts.

(10) Chronometers. Management and care, winding, rating and comparing.

12. Paper 6. (written).

English. (1½ hours).

The paper 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. This paper may consist of any essay, a precis or an exercise in letter writing.

13. Oral and Practical.

(1) (a) Rigging of ships. Strength of ropes including wire ropes. Rigging purchases of various kinds and knowledge of power gained by purchases. Knotting and splicing with strict reference to current practice. Seizings, rackings, chain stoppers, etc.

(b) Sending topmasts up and down.

(c) Bending, setting and taking in lifeboat sails. Management of boats under oars or sail and in heavy weather. Beaching or landing. Coming alongside.

(d) Helm Orders. Conning the ship. Effects of propellers on the steering of a ship. Stopping, going astern and manoeuvring. Turning a steamship short round. Emergency manoeuvres. Man overboard.

(2) (a) Marking and use of ordinary lead line.

(b) Use and upkeep of mechanical logs sounding appliances.

(c) Use and upkeep of engine room and other telegraphs.

(d) Rocket and line throwing apparatus.

(3) (a) Anchors and cables and their use and stowage. Bringing a ship to a single anchor in an emergency.

(b) Knowledge of use and maintenance of deck appliances and steering gear.

(c) The use of lifesaving appliances.

(d) The use of Fire Appliances including the Smoke Helmet.

(4) (a) Preparations for getting under way. Duties prior to proceeding to sea, making harbour, entering a dock. Coming alongside, and securing to a buoy, with special reference to the after end of a ship.

(b) Keeping an anchor watch. Dragging anchor.

(c) Duties of officer of the watch. Use of compass to ascertain risk of collision.

(5) (a) A full knowledge of the content and application of the regulations for preventing collisions at sea. (Candidates will not be placed in the position of handling a sailing ship, but will be expected to recognize a sailing ship's lights and to have a knowledge of her possible manoeuvres according to the direction of the wind).

(b) Distress and pilot signals; penalties for misuse.

(c) British uniform system of buoyage; wreck marking system.

(d) A knowledge of the contents of the Ministry of Transport Book of Merchant Shipping Notices and the use of Admiralty Notices to Mariners.

(6) (a) To read and understand a barometer, thermometer, hydrometer, and hygrometer. (The instruments supplied by the Meteorological Office will be taken as standard).

(b) To use an azimuth mirror, pelorus (bearing plate) or other instrument for taking bearings.

(c) To use a sextant for taking vertical and horizontal angles; to read a sextant both on and off the arc.

(d) To correct a sextant into which has been introduced one or more of perpendicularity, side or index errors.

- (e) To find the index error of a sextant.
 (f) To check chronometers by signal made by buzzer or other method; to compare two chronometers.

14. The examiner may ask the candidate questions arising out of the written work, if he deems it necessary on account of weakness shown by the candidate.

15. Signals. To send and receive signals in—

- (1) British Semaphore up to eight words per minute.
- (2) Morse Code by flash lamp up to six words per minute.
- (3) International Code of Signals.

FIRST MATE (FOREIGN-GOING).

16. Paper 1. (written).

Practical Navigation. (3 hours).

(This paper may include questions on the syllabus for Second Mate, extended to include the Moon and Planets.)

(1) To calculate the approximate time (to the nearest minute), of the meridian passage of a heavenly body; to calculate an approximate altitude for setting the sextant to obtain the meridian altitude of a heavenly body. To find the latitude by the meridian altitude of a heavenly body.

(2) To find the direction of the position line and a position through which it passes from an observation of a heavenly body near or out of the meridian.

(3) To obtain the ship's position by the combination of any two observations with or without run.

(4) To calculate the initial course and the distance on a Great Circle or Composite Great Circle track between two positions and to determine one or more positions on the track.

17. Paper 2. (written).

Chart Work and Pilotage. (2 hours).

In addition to the syllabus for Second Mate questions on the following may be asked either in the written or oral parts of this paper.

(1) Distance of sighting lights, distance from a point of land of known height.

(2) Construction and use of a line of soundings. The use of a single position line in approaching the coast. The use of Wireless Beacons.

(3) To find the times and heights of high and low water at a Secondary Port (Admiralty Tide Tables) by the use of Tidal Differences.

(4) Candidates will be examined orally on the reliability of charts.

Section of suitable points for bearings. Approaching an anchorage and entering narrow waters. Landfalls in thick and clear weather.

(5) The candidate may be examined orally or practically on the use of a Gnomonic chart and the transfer of a Great Circle or Composite track from such a chart to a Mercator chart and on the use of Lattice Charts.

18. Paper 3. (written).

Ship Construction and Stability. (3 hours).

(1) A general knowledge of the principal structural members of a ship. The proper names of the various parts. Midship sections of Single deck, Tween deck and Shelter deck ships and Bulk-oil carriers. Functions, construction and stiffening of watertight bulkheads, including collision bulkhead. Stern frame and stem and how secured. Rudders and the methods of attachment. Construction,

stiffening and closing arrangements of hatchways. Hawse-pipes and how secured. Rivets and riveting. Testing a line of rivets. Testing of tanks and other watertight work.

(2) Stresses and strains in ships in a seaway or due to loading and ballasting. A knowledge of those parts of a ship specially strengthened to withstand such stresses, or where damage by excessive corrosion is liable to occur.

(3) Ability to set out in a clear manner a report on damage sustained during a voyage.

(4) Buoyancy and Reserve buoyancy. The righting couple when a ship is inclined by external force. Transverse and Longitudinal Metacentres. Metacentric Height. Initial Stability and its limitation to small angles of inclination. The computation of areas by Simpson's First and Second Rules and the Five-eighth Rule.

(5) Determination of Centre of Gravity of a ship in a new condition, the Centre of Gravity in the old condition being given. The effect on the position of the Centre of Gravity of adding, removing or shifting weight. Stiff and tender ships.

(6) Change in stability during a voyage. Effect of a shift of cargo or solid ballast. The danger of "free surface" of liquids (without proofs or calculations).

(7) Change of trim. (M.C.T.1" and C.F. given).

(8) Use of stability curves and data supplied to a ship.

19. Paper 4. (written).

Meteorology. (2 hours).

(1) The principles of the barometer, mercurial and aneroid. Marine mercurial barometer. How to read and reduce the readings to standard datum.

The use of the Gold slide. Barograph.

(2) The principles of the thermometer and hygrometer and their uses at sea.

(3) The principle and use of the hydrometer.

(4) A knowledge of the distribution of mean pressure and the prevailing winds and current systems of the globe. Relationship between pressure distribution and wind. Buys Ballot's Law.

(5) The characteristics of, and weather associated with, the principal pressure systems, e.g. anticyclones, depressions. Permanent and semi-permanent anticyclones and depressions and their effects, e.g. Trades, Monsoons.

(6) Tropical revolving storms, their localities, seasons and tracks.

Rules for avoiding tropical storms. Use of barometric observations at a single station in conjunction with weather signs.

(7) Water vapour in the atmosphere, evaporation, condensation, precipitation, meaning of saturation, relative humidity, formation of clouds, fog and mist.

(8) Anabatic and Katabatic Winds. Land and Sea Breezes.

(9) The Beaufort wind scale and weather notation in use at sea. Method of estimating direction and force of wind at sea.

(10) A knowledge of the types of weather messages adopted by the International Meteorological Organization which are available to shipping. Coding and decoding messages contained in Parts V and VI of Weather Message for Shipping.

20. Paper 5. (written).

Ship Maintenance, Routine and Cargo Work. (3 hours).

(1) Keeping a ship's log. (Mate's log).

(2) Organization of crew for routine, maintenance and duties.

(3) Inspection and maintenance of the ship and her equipment, *e.g.* bulkheads, double bottoms, deep tanks, bilges, pipelines, strums, rudder, anchors and cables and steering gear. Drainage of holds and tanks. Drydocking routine.

(4) Properties and uses of paints and other protective covering. Scaling and painting. Treatment of woodwork. Cement work.

(5) Indents and stores. Repair lists.

(6) Simple calculations of stresses in spans, derricks, topping lifts, etc. Strength of ropes, wire ropes and chains. Various types of ropes, wire ropes, slings and their uses. Purchases and power gained.

(7) Use and maintenance of cargo working gear and the organization of cargo work. A knowledge of relevant parts of the Factory Acts. General principles of cargo stowage and handling, *e.g.* dunnaging, ventilation and slinging. The carriage of special cargoes such as Refrigerated Cargoes, Steel Rails, Liquids in bulk, Deck Cargoes and Timber Deck Cargoes, Bulk stowage. The use of shifting boards. Separation. Precautions to be taken with solid ballast. Ventilation of different type of cargoes. Sweat: cause and prevention.

(8) Given a cargo list, to stow a hold or holds, making a rough stowage plan, having regard to stability, behaviour of vessel in a sea way, damage and contamination of cargo, and accessibility at optional ports of discharge.

21. Paper 6. (written).

Elementary Magnetism, Electricity and the Gyro Compass. (2 hours).

(1) Magnetism.

(a) A simple magnet. Poles of a magnet. The law of attraction and repulsion. The molecular theory of magnetism as applied to ferro-magnetic materials. The conception of magnetically "hard" and "soft" iron. The shape of the magnetic field round a magnet. The meaning of the terms Intensity of Magnetisation, Magnetic Susceptibility and Permeability. (No mathematical formulae will be required).

(b) The Earth's magnetic field. The Earth's magnetic poles. Magnetic equator. The Earth's total magnetic force. Angle for dip. Horizontal and vertical components. Magnetic variation. (No mathematical formulae will be required).

(c) The effect of constraining a compass needle to the horizontal plane. The effect of introducing a disturbing force into the vicinity of a compass needle.

(d) The care and maintenance of different types of ship's compasses.

(2) Electricity:

(a) A simple conception of the Electronic Theory. Current, difference of potential, resistance and their units. OHM's Law. Effect of an electric current (i) Heating effect. Power. The electric unit; (ii) Chemical effect. Simple cells, primary and secondary; (iii) Magnetic effect. Field due to a current. Field of a current carrying solenoid and the effect of introduction of ferro-magnetic material into such a field. Magnetostriction.

(b) The Electric motor: Measuring instruments—moving coil and moving iron. Electro-magnetic induction. Movement of a conductor in a field. Variation in magnitude of a field. Effect of make and break of a current. Induction coil. Unit of Inductance. Dynamo principle—simple commutator.

(c) Electro-static field. Unit of capacity. Condenser or Capacitor.

(d) Fuses, switches and simple ships' circuits. Use of measuring instruments. How to measure current and voltage.

(e) Principal symbols used in diagrams.

(3) Gyro-Compass.

A simple non-mathematical treatment of the following—

The principle of the Free Gyroscope. The effect of the earth's rotation. Tilt and drift. Precession. Gravity control. Damping.

22. Oral.

(1) (a) Shifting large spars and rigging sheers.

(b) The handling of heavy weights with special reference to strength of gear used.

(c) Use and care of all deck and above deck appliances and fittings—winches, capstans, windlasses, emergency steering gear, and fittings used between anchor and cable locker. Hoisting in boats.

(2) Anchors—different kinds; advantages and disadvantages of each. Cables and their care. Preparations for anchoring. Operation of anchoring with single anchor and use of second anchor. Clearing a foul anchor. Mooring. Clearing a foul hawse. Anchoring in a tideway and in a confined space. Slipping a cable. To carry out an anchor with boats. Getting under way.

(3) (a) Coming alongside of a wharf, etc. Manoeuvring in rivers and harbours. Effects of current, wind, shallows and draught on manoeuvring.

(b) Management of steamships in stormy weather. Means to employ to keep a vessel, disabled or unmanageable, out of the trough of the sea and to lessen her lee drift.

(c) To take a cast of the deep sea load.

(4) (a) An outline knowledge of the regulations concerning Lifesaving Appliances.

(b) Accidents, *e.g.* collision, running aground, accidents to hatches, leaks, fires and their treatment. Running repairs. Handling a disabled ship.

(c) A practical knowledge of the screening of ship's navigation lights.

(d) Preparations for drydocking and undocking. Use of shores, bilge blocks and bilge shores.

(5) Regulations for preventing collisions at sea, etc.—as for paragraph 13

(5) (Oral: Second Mate).

(6) The examiner may ask the candidate questions arising out of the written work, if he deems it necessary, on account of weakness shown by the candidate.

23. Signals.

(1) To send and receive signals in—

(a) British Semaphore up to eight words per minute.

(b) Morse Code by flash lamp up to six words per minute.

(c) International Code of Signals.

(2) The practical use of shipborne W/TD/F.

MASTER (FOREIGN-GOING).

24. Paper 1. (written)

Practical Navigation. (3 hours).

(1) A short recapitulation paper in Navigation on the syllabus for Second Mate and First Mate which may include Chart Work and Pilotage.

(2) The Admiralty Method of Tidal Predictions and the use of Harmonic Constants. (Admiralty Tide Tables).

25. Paper 2. (written).

(Magnetic and Gyro Compass. (3 hours).

(This paper will require more detailed knowledge of the elementary principles of Magnetism than is required for First Mate).

(1) The inverse square law, simple problems involving unit poles. The field strength, magnetic moment of a magnet, the period of a suspended magnet vibrating in the earth's field.

(2) Magnetic Compass. The method of determination, and compensation by means of components, of the effects of the ship's magnetic field on the magnetic compass. The approximate Coefficients A, B, C, D and E and their use. Conditions which might produce Coefficients A and E. Constants Lambda and Mu. The Ship's Multiplier. Methods of obtaining a table of deviations. Analysis of a table of deviations to obtain Approximate Coefficients. To determine the deviation caused by the ship's permanent magnetism and/or induced magnetism in vertical soft iron by means of observation taken in two widely separated Magnetic Latitudes.

(3) (a) General principles of Compass Correction and the method of correction for Coefficients B, C and D.

(b) The cause and effect of retentive magnetism and Caussin error.

(c) Siting of compasses with particular reference to the proximity of magnetic material and electrical appliances. Heeling Error, its cause, effects and method of correction. Effect of heeling error magnets on soft iron correctors.

(4) (a) Gyro Compass. A fuller knowledge of the theory than that required for First Mate, but mathematical proofs will not be required.

(b) To include in addition to the above—Course and speed error. Correction for latitude. Ballistic deflection and its relation to Course and Speed Error. Rolling Error and how it is minimized.

(c) The principal parts of a gyro compass and the repeating system. The more important fundamental differences in the construction of the better known types of gyro compasses and the methods used to eliminate or allow for the principal errors.

26. Paper 3. (written).

Ship Construction and Stability. (3 hours).

(1) A fuller knowledge of ship construction than is required for lower grades of certificates. The Scribe Board and its uses. Bending Slab and methods of bending. General structure. Keels, framing, stem, stern frame and rudder post, transverse and longitudinal girders, centre through plates, keelsons and intercostals, double bottoms, side stringers, shell plating, bulkheads, deep tanks, pillars, propeller brackets, rudders. Superstructures. Masts and derricks.

(2) Types of Vessels, e.g. General traders and bulk oil carriers. Strength and construction in relation to their trade.

(3) Classification of ships. Surveys. General ideas of tonnage measurement. Freeboard and a general outline of conditions of assignment.

(4) Immediate treatment of accident damage—collision, bad weather, stranding. General ideas on welding in ship repair work. Drawing up of simple specifications. The direction of simple repairs.

(5) A fuller knowledge of Stability than is required for First Mate. Simple calculations involving volumes, moments and effects of free surface of liquids. (proofs of formulae will not be required). Effects of bilging and flooding compartments. Permeability. Trim and Moment to change trim. Stability and trim when grounding. The Inclining Experiment. Effect of beam and freeboard on stability. Practical operations to ensure ship stability at sea—

Deck cargoes, homogeneous cargoes, suspended weights and cargoes liable to shift. Dangers of a ship with a heavy list and precautions when righting. Management of ballast tanks. Ballasting.

27. Paper 4. (written).

Shipmaster's Business. (2 hours).

(The legal knowledge required will not go beyond the outline of the Merchants Shipping Acts and Mercantile Law which a shipmaster must know in order to conduct the business of a ship).

(1) Registration of ships. The Certificate of Registry and its legal significance.

(2) Certificates and other Documents required to be carried on a ship, how they are obtained, and the period of their legal validity. Suez and Panama Canal Certificates.

(3) Engagement, discharge and management of a ship's crew. Manning qualification. Ship's Articles of Agreement. Wages and other remuneration. National Insurance contributions. Discipline and treatment of offences. Fines and forfeitures. Deserters, deceased seamen, engagement of substitutes.

(4) The official log book and the law relating to entries.

(5) Crew accommodation.

(6) Hygiene of ships, living spaces, holds, etc. Water. Fresh and preserved food. Procedure required on board in cases of infectious diseases, illness or accident. Quarantine procedure. Fumigation.

(7) Entering and Clearing ship.

(8) Loadline marks and their general and seasonal use. Entries and reports to be made respecting freeboard and draught.

(9) The safety of the ship, crew and passengers. Assistance of vessels in distress and salvage. Duties in case of collision and accident.

(10) The law relating to the reporting of ice and derelicts. Compulsory and non-compulsory pilotage.

(11) The meaning of the terms "passenger ship" and "emigrant ship".

(12) A general knowledge of shipping practice and documents with particular reference to Charter Parties and Bills of Lading, and an understanding of their principal clauses, e.g. Freight, Deviation, Always Afloat, Ice, Lay-days, Demurrage, Despatch. Protests. Certificate of Seaworthiness. A simple knowledge of the law relating to carriage of cargo and the shipowners' liabilities and duties.

(13) A knowledge of the more important clauses contained in a Policy of Marine Insurance. The meaning of Average. Particular Average. General Average. Procedure in the case of General Average. Procedure at a port of refuge. Lloyd's Agents.

28. Paper 5. (written).

Elementary Engineering and Electricity including Electronic Navigation Aids. (3 hours).

(1) Engineering.

(a) The meaning of the general engineering terms sensible heat, latent heat, saturated steam, super heated steam, work and power, horse power, propeller pitch, slip.

(b) A simple knowledge of the following—namely Types of marine boilers, coal and oil fired furnaces; Procedure for raising steam. The action of the reciprocating steam engine, turbine machinery and diesel engines. Procedure when warming up, turning, starting, stopping and reversing engines.

(c) The use of the condenser, evaporator and hot well. Use of circulating, air, food, bilge and ballast pumps. Valve chests.

(d) Fuel consumption and economical speeds, estimation of minimum fuel consumption to complete a given voyage. Simple slip problems.

- (e) A simple knowledge of the types of refrigeration systems used on board ships.
- (2) Electricity.
- (a) The simple alternator. Alternating current; frequency, phase relationship between two alternating quantities; effects of inductance, capacity and resistance. Resonance. Turned circuits. The power transformer. The simple telephone and microphone.
- (b) R. F. oscillations. Radiation of electro-magnetic waves in free space—frequency, velocity and wavelength and their relationship. Reception of electro-magnetic waves. Effects of the Ionosphere—ground wave, sky wave.
- (c) Thermionic valves. Thermal emission. Diode valve—use as a rectifier. Triode valve use as voltage amplifier and use as simple oscillator.
- (d) Cathode ray tube—construction and action; electrostatic and electro-magnetic deflection. The time base as applied to C.R.T.
- (3) Electronic Navigation Aids.
- (a) A simple knowledge of how Radar works. Displays, range and bearing discrimination, calibration, range strobes, monitoring, spurious echoes, side lobe effects, blind sectors, anomalous propagation and weather effects. Its use as an anti-collision device and navigational aid and an appreciation of its limitations.
- (b) The general principles underlying Hyperbolic Navigation. Fundamental differences between various systems.
- (c) A general knowledge of ship W/T direction finding; Rotating loop and goniometer systems. Maximum and minimum signals; Sense. Quadrantal error. Calibration. Sunset and sunrise effects. Land effects.
- A general principle of echo sounding. Methods of transmission. Timing device. The receiver. Methods of recording. Reliability of indications.

29. Paper 6. (written).

Meteorology. (2 hours).

(In addition to the Syllabus for First Mates)

- (1) The principal cloud types.
 - (2) Simple ideas of air masses and fronts.
 - (3) Adiabatic changes in the atmosphere. Stability and instability.
 - (4) The frontal theory of the formation of depressions.
 - (5) To construct a synoptic chart (excluding fronts), from a number of coded groups as given in Parts V and VI of Weather Messages for Shipping.
 - (6) To decode groups as given in the international analysis code, (Part IV), Weather Message for Shipping, and draw the weather map.
 - (7) The use of a synoptic chart or weather map for deducing the probable weather and anticipated changes at a specified point or points.
 - (8) The main types of floating ice and their origin. General ideas of distribution and seasonal movements. Navigation in the vicinity of ice.
 - (9) General points to consider in the selection of ocean routes.
30. Oral.
- (1) (a) Exceptional circumstances. Loss of rudder; shifting a damaged rudder. Construction of jury rudders. Making and launching of rafts. Collision. Leaks. Damage of all kinds. Running repairs and precautions in case of accidents. Grounding—methods of refloating. Beachings a vessel. Steps to be taken when disabled and in distress.

- (b) Preservation of crew and passengers in the event of wreck. Abandoning a wrecked ship. Rockets and rocket apparatus. Communications with the shore.
 - (c) Assisting a vessel in distress. Rescuing crew of a disabled ship.
 - (d) Towing and being towed.
 - (e) Bad weather manoeuvres. Precautions at anchor and at sea. Use of oil. Anchoring and working anchors and cables in all circumstances. Approaching rivers and harbours and manoeuvring in them.
 - (f) Drydocking. General procedure and precautions to be observed. Distribution of weight. Drydocking with full cargo for inspection of propellers or shafting. Bilge blocks. Leaving the vessel water borne. Putting into port with damage to ship or cargo, both from business and technical points of view. Safeguarding of cargo.
 - (g) Prevention of fire at sea. Spontaneous combustion. Full knowledge of the use of fire appliances and the precautions to be taken in their use. Special reference to the extinguishing of oil fuel fires.
 - (h) Methods of fumigating holds and living spaces and safeguards in applying them.
 - (i) General organization of a ship's work and handling and training of crew. A knowledge of training facilities available to members of the crew.
 - (j) Compensation and adjustment of compasses. Demonstrations on Beall's Compass Deviascope or Instructional Binnacle.
- (2) Regulations for preventing collisions at sea, etc. As for paragraph 13(e). (Oral: Second Mate).
- (3) The examiner may ask the candidate questions arising out of the written work, if he deems it necessary on account of weakness shown by the candidate.
31. Signals. To send and receive signals in—
- (a) British Semaphore up to eight words per minute.
 - (b) Morse Code by flash lamp up to six words per minute.
 - (c) International Code of Signals. Trawling Skipper (Limited):
32. Pilotage (3 hours—Marks 200).
- Note.* Only charts of the areas adjacent to Hong Kong will be used in the examination.
- A candidate will be required—
- (1) to use an Admiralty chart or plan and to answer questions orally on the information to be derived therefrom *e.g.* abbreviations, conventional signs, depth of water, nature of sea bed, navigational marks, buoys and lights, variation, measurement of distance, etc.;
 - (2) to set a course to steer by compass from a given position to Hong Kong or to any other place of safety or given position, allowing for the set and drift of a given tide or currents; the first position may be given or the data given to fix it either by given simultaneous cross bearings or by plotting a given course and distance run from a previous given position making due allowance for a given tide or current;
 - (3) to find the estimated position of the ship by means of two bearings of the same shore object, making due allowance for a given tide or current during the period of run on a given course between the first and second bearings; and to find the distance at which the ship will pass a given point;
 - (4) to be able to take a bearing by compass, and by using a card of deviations, convert it to a magnetic and thence to a true direction to lay off on a chart;

- (5) to be able to find the deviation of a compass for a particular direction of the ship's head, by means of transit bearings of two shore objects;
- (6) to be able to find by two different fixes of the ship, and the course steered between them at a given speed, the amount of set and drift experienced.

33. Practical Navigation (2 hours—Marks 200).

A candidate will be required—

- (1) to show that he is familiar with the Abridged Nautical Almanac as regards the Declination of the Sun;
- (2) to ascertain the latitude from a given observation of the sun when on the meridian;
- (3) to show that he understands the difference between compass direction, magnetic direction and true direction, and is able to find the error and thence the deviation of the compass by—
 - (a) bearing of the sun at noon in the winter season, or at rising or setting of the sun at any season;
 - (b) approximately by bearing of the Pole Star.

34. Oral Examination in Seamanship.

A candidate must understand and give satisfactory answers to questions on the following subjects—

- (1) the use and adjustments of the sextant and the finding of index error by the horizon;
- (2) the use and reading of an aneroid barometer, a knowledge of the local typhoon signals and the normal tracks of typhoons in the China Seas;
- (3) the use and maintenance of a patent log;
- (4) the marking and use of lead lines and other sounding apparatus;
- (5) the Rule of the Road at Sea and the contents and application of the Regulations for Preventing Collisions at Sea;
- (6) the uniform system of buoyage and marking, and the wreck marking system;
- (7) signals of distress and use of rockets and flares, and the penalties for their misuse;
- (8) the use of Line Throwing Rocket Apparatus in the event of stranding, taking in tow or being towed;
- (9) the correct action to be taken in case of a man overboard and the use and care of life-saving appliances;
- (10) how to improvise and use a sea anchor;
- (11) how to rig and use a jury rudder;
- (12) the handling of a single-screw small vessel in bad weather in heaving-to, etc.;
- (13) emergency action in regard to steering gear defects, engine breakdown, fire on board, underwater damage or leaks, etc.;
- (14) elementary questions on manoeuvring, getting under way, coming to an anchor or buoy, etc.;
- (15) general knowledge of the requirements of the Merchant Shipping Acts and the Hong Kong Merchant Shipping Ordinance, relating to strandings, collisions or other shipping casualties, reports to be made in cases of death or injury to persons, return of crew lists and agreements and certificates of discharge;

- (16) the correct action to be taken and reports to be made in the event of the trawl fouling an underwater cable and the avoidance of areas where deep sea cables are known to be laid;
- (17) any other practical question relating to the duties of a person in charge of a trawler which the examiners may think appropriate.

35. Signalling.

A candidate must be able to—

- (1) send and receive morse at the rate of 4 words per minute;
- (2) recognize the flags of the International Code and know the meanings of the following single flag urgent and important signals—
A, D, F, K, L, O, R, U, V.

TRAWLING MASTER.

36. Pilotage (2½ hours—Marks 200).

Candidates will be required to show a high degree of knowledge in the subjects specified in paragraph 32 of this Schedule and in addition thereto an adequate knowledge in the following subjects—

- (1) the use of the tide tables for the Standard Port of Hong Kong;
- (2) the use of vertical danger angles taken by the sextant, and the distance of a lighthouse or point of land of known height from the point of observation;
- (3) the method of fixing a ship's position by means of the bearing of a shore object crossed with a celestial position line.

37. Practical Navigation (3 hours—Marks 200).

Candidates will be required to show a high degree of knowledge in the subjects specified in paragraph 33 of this Schedule and in addition thereto an adequate knowledge in the following subjects—

- (1) how to find the error, and thence the deviation of a compass by means of tables only or by means of time azimuth of the sun;
- (2) how to determine the position line and position through which it passes by means of an altitude of the sun observed out of the meridian at a given Greenwich Mean Time by chronometer or deck watch;
- (3) how to check a chronometer or deck watch by radio or visual time signals.

38. Oral Examination in Seamanship.

Candidates will be required to show a high degree of knowledge in the subjects specified in paragraph 34 of this Schedule and in addition thereto a knowledge in the following subjects—

- (1) meteorology—sufficient to understand the meaning of weather bulletins and typhoon warnings broadcast for the use of Mariners in the China Seas;
- (2) the maintenance and care necessary to keep a trawler in a sea-worthy condition at all times and closing appliances to below deck spaces;
- (3) an elementary knowledge of the effects on the stability of a trawler of slack tanks (either water or fuel), loading on deck or overloading, and seas shipped on or below deck;
- (4) methods of refloating after grounding;
- (5) assisting a vessel in distress or aircraft on the water, rescuing the crew of a disabled vessel or aircraft and the use of oil in heavy weather.

39. Signalling.

A candidate must be able to—

- (1) send and receive morse at the rate of 4 words per minute;
- (2) recognize the flags of the International Code and know the meanings of the following single flag urgent and important signals—
A,D,F,K,L,O,R,U,V.

PART II.

A. COMPASS DEVIATION.

(a) Magnetism.

40. Candidates will be required to show full knowledge of the subjects referred to in sub-paragraph (1) of paragraph 21, and paragraph 25 of this Schedule and will, in addition, be required to answer questions calling for a knowledge of the following—

- (1) Magnetic properties of materials, induction, susceptibility and permeability. Magnetic effects of electric currents, including calculations.
- (2) Terrestrial magnetism. Dip, total force, horizontal force and vertical force. Effects on the deviation of the compass accompanying change in the values of these elements. Variation.
- (3) Ship's magnetism. Hard and soft iron. Permanent, subpermanent and induced magnetism. Components P,Q,R, the rods a, b, c, d, e, f, g, h, k. The approximate coefficients A, B, C, D, E. Heeling Error. Lambda, Lambda two and Mu.
- (4) General principles of compass correction. Methods of finding, and compensating a compass for the various components which might cause deviation, including the effects of heel and trim.
- (5) Compensation by use of the Kelvin deflector. Principle of the deflector method and information which can be deduced from readings obtained.
- (6) The siting and lining up of compasses with due regard to the proximity of magnetic material, electrical devices and other disturbing influences.
- (7) The theory of degaussing in ships fitted with M coils and compass compensation by means of B and heeling error coils.
- (8) Swinging ship and the analysis of a deviation table.

(b) Electricity.

41. Candidates will be expected to show full knowledge of the subjects referred to in sub-paragraph (2) of paragraph 21 and sub-paragraph (2) of paragraph 28 of this Schedule and will, in addition, be required to answer questions calling for a knowledge of the following—

- (1) D.C. Circuits.
 - (a) Kirchoff's Laws and their applications.
 - (b) Measurement of resistance by simple bridge method. Principle of Megger and its use.
 - (c) Principles of Electrolysis; concept of the principles of Cathodic Protection.
 - (d) A qualitative treatment of the effect of inductance in a D.C. circuit.
 - (e) A qualitative treatment of the charge and discharge of a condenser in a resistive circuit.

(2) D.C. Motors and Generators.

- (a) Simple relationships between speed, field-strength induced e.m.f., armature current and torque. Behaviour of shunt, series and compound-wound machines. The concept of power losses in a machine; efficiency. Simple starter for D.C. shunt-wound motor. Voltage control of shunt-wound dynamo.
- (b) The magnetic relay as exemplified in simple shunt motor starter with no-volt and overload releases.
- (3) A.C. Motors and Generators.

The principles of rotating armature, rotating field and inductor type generators and induction motors.

(4) A.C. Circuits.

- (a) Peak, Average and Root Mean Square values of sinusoidal alternating voltages and currents.
- (b) A quantitative treatment of the effect of resistance, inductance and capacitance in a series A.C. circuit; reactance.
- (c) Simple examples of vector treatment of combinations of resistance, inductance and/or capacitance in a series A.C. Circuit; impedance; resonance.
- (d) Power in an A.C. circuit; power factor.
- (5) High Frequency Circuits.
 - (a) The fundamental principles of heterodyne and superheterodyne reception.
 - (b) Principles of suppression of radio interference from electrical equipment.
 - (c) An elementary knowledge of the principles of directional aeriels. The interpretation of the horizontal polar diagram, as exemplified in the case of the simple loop aerial and radar aerial.
 - (d) A concept of the meaning of the term "Aerial Gain" and a knowledge of the use of the decibel as a unit used in the measurement of relative power.
 - (e) The causes of fixed and variable errors to which navigational aids, used in British ships, are subject.

B. SPECIAL SIGNALLING.

42. The examination in Signalling will in all cases begin with an examination in the International Code, including Morse Flashing and Semaphore.

43. Morse Flashing and Semaphore.

- (1) Candidates for the examination will be required to attain a minimum speed of 12 words a minute in Semaphore and 10 words a minute in Morse flashing; the average length of a word is taken as 5 letters.
- (2) The Morse flashing test will consist of a Test message, followed by a Spelling message of 25 words, and the Semaphore test will consist of a Spelling message of 50 words.
- (3) In the examination in Morse flashing, the candidate will first be required to make a Test message, followed by a Spelling message of 25 words. The examiner will then make a Test message, followed by a Spelling message of 25 words to be read by the candidate.
- (4) The same procedure will be observed in the Semaphore test, except that, as a Test message is not given, the candidate will be required to make a Spelling message of 50 words, and then to read a message of 50 words made by the examiner.
- (5) Candidates will be thoroughly tested in the various signs and the procedure of calling up, sending and answering a signal.

C. RADAR MAINTENANCE.

BASIC THEORY.

44. Function of Radar as a navigational aid.

Fundamental Principles of Radar.

(1) Measurement of range interval as time interval. Accuracy of measurement, measurement of time by C.R. Tube. Pulse transmission, bearing by bearing the transmission, minimum range, range discrimination, bearing discrimination, effect of pulse length. Peak power and average power. Effect of "beam width" on (a) bearing discrimination, (b) field strength at the target. Radar range equation.

(2) Series L.R. Circuits, growth and decay of current, time constant. Series CR circuits, exponential charge and discharge curves, time constant, numerical examples. Coupling circuit, differentiating circuit, integrating circuit. Output from CR circuit with square wave input, graphs.

(3) Cathode biasing, H.T. potentiometer biasing. Grid return to H.T. grid current limiting. Series and Parallel limiting using diodes. D.C. restorer. Squaring circuits. Peaking circuits, trigger circuits. Paraphase amplifiers. Interelectrode capacitance of triode valve. Input impedance of triode with R. load, with reactive load. Negative feedback, cathode followers.

(4) Phase shifting circuits. Phase shift oscillator. Blocking oscillator, R.C. transitron oscillator. Multivibrator:— free running, triggered, electron coupled.

Symmetrical and Asymmetrical.

Synchronization of multivibrator. Waveforms, frequency and period of multivibrators and oscillators. Production of variable length square pulse from trigger pulse.

(5) Cathode ray tubes, construction and action. Screen types, Electrostatic focus and deflection, shift, deflection distortion. Electromagnetic focus and deflection, shift. Use as a P.P.I. Cathode ray oscilloscope and its use in waveform monitoring.

(6) Time Base requirements. Voltage waveform required for E.S. deflection. Simple sawtooth generator, pentode charging circuit, hard valve, time base, miller time base.

Current waveform required for E.M. deflection, voltage waveform required trapezoidal generator, power amplifiers, time base requirements for P.P.I. display. Rotating radial trace. Rotating deflector coils and driving systems. Rotating field, selsyn system. Power supply circuits, E.H.T. from voltage multiplier rectifier systems using metal rectifiers. Need for voltage regulated H.T. (to time base and other circuits). Voltage regulator circuits.

(7) Need for brightening pulse. Brightening pulse circuits. Ringing oscillator, use as a delay circuit, use in calibration circuits. Variable range marker, simple range marker circuit.

(8) Radar receivers. Signal to morse ratio, bank with requirements, wide bank I.F. amplifiers, video amplifiers, series and shunt compensation of video amplifiers.

Need for synchronization of operations. Block diagram of synchronizing systems. Delay circuits. Transmission lines. D.C. applied to transmission line, infinite line, shorted line, open line. Characteristic impedance, propagation time. A.C. applied to a transmission line, infinite line, open line, shorted line. Reflection at mismatch, standing waves, standing wave ratio. Resonant line sections. Quarter wave and half wave open and shorted stubs. Duplexing by transmission line section. Transmission line as a delay circuit.

(9) Transmission of Power at U.H.F. losses on transmission lines at U.H.F. waveguides, propagation in a waveguide. Rectangular and circular guides. Simple modes. Impedance matching. Irises, screws, stubs. Choke joints. Rotating joints.

Screw couplings, contact shims. Waveguide attenuator. Waveguide duplexing system. Typical waveguide system. TR and TB horn radiator.

(10) Cavity resonators. Simple half wave cavity resonator. Types of cavity resonators. Methods of tuning. Limitations of valve oscillators at U.H.F., transit time, stray reactances. Performance monitors. Reflex klystron, methods of tuning, modes of oscillation and power output limitations.

Resonant cavity magnetron.

Modulators, thyratron and trigatron, need for square pulse to magnetron. Artificial lines, as a pulse forming network, as a delay network. Artificial line charging circuits.

Pulse transformer.

(11) Double and single mixer systems. Crystal diodes. Automatic frequency control, basic principles, discriminator circuits. Control circuits. Concept of operating error of A.F.X. system.

(12) Aerial arrays, polar diagrams, parabolic reflector, beam width. Side lobes. Lobes due to ground reflections.

(13) Sea clutter and anti-clutter devices.

False and multiple echoes, blind sectors. Anomalous propagation, Remarks and Racons, chart comparison units.

Written Examination.

45. This will be a 2½ hours paper with a choice of questions.

(1) Questions set on the subject matter of the syllabus will ask for basic principles of the various operations in a radar set.

(2) Descriptive treatment of the action of circuits and components with the aid of diagrams, simple circuits and waveforms.

(3) Graphical treatment of charge and discharge of C through R and of pulse shapes concerned with differentiating and integrating circuits.

(4) Quantitative treatment of RC and LR time constants and differentiating and integrating circuits.

(5) Quantitative treatment of range measurement, minimum range, range discrimination, bearing discrimination, peak power and average power.

(6) Application of basic theory to the set with which the candidate is familiar with the aid of block schematic diagrams and waveforms.

TECHNICAL/PRACTICAL.

46. (1) (a) Block diagram of the installation.

Power supply circuits, motor alternator, starter and voltage regulator circuits.

(b) Location of parts.

Starting procedure. Routine maintenance.

(2) (a) The display unit. Power supplies.

Circuits associated with the display:—time base circuits.

Calibration and/or variable range marker circuits.

Brightening pulse circuits.

Receiver, main I.F. and video amplifiers.

Swept gain.

- (b) Location of parts. Setting up of the display—
Brilliance, focus and shift. Range adjustment, centre adjustment.
Adjustment of calibration and/or variable range marker circuits. Lining up the display ships' head.
- (3) (a) Modulator and transmitter circuits with their associated power supply circuits. Duplexing system.
- (b) Location of parts. Changing the magnetron and other special valves. Routine maintenance.
Setting up of adjustable circuits.
- (4) (a) Mixer system. A.F.C. circuits. Pre I.F. amplifier circuits.
- (b) Location of parts.
Lining up A.F.C. section. Tuning local oscillator and R.F. system.
- (5) (a) Aerial system and associated circuits. Bearing transmission system.
- (b) Location of parts. Maintenance of aerial system.
- (6) Routine maintenance. Use of monitor meters. Tolerance of monitor meter readings. Waveform monitoring (If available with the installation). Use of Test instruments.

Faults:—Isolation of faulty circuit, isolation of faulty component, clearing of fault.

Interpretation of symptoms observed on the display and monitor meters. Safety devices, fuses, etc.

Practical Examination.

47. The Candidate will be examined on the type of installation that is fitted at the College where the examination is conducted.

He will be required to switch on the set and make any adjustments necessary to obtain a satisfactory picture on the display. He should be able to recognize whether the controls are correctly or incorrectly adjusted. He should know how to maintain motors and generators and moving parts. He should be capable of reading circuit diagrams of the set and using them when tracing faults, also of using information contained in the Service Manual to aid fault finding.

He should know the layout of the circuits and their action, also be able to explain the reason for and the effect of adjustments made.

48. Memorization of circuit diagrams in detail, component numbers etc. will not be required as those should be available in the Manuals.

D. CERTIFICATE OF EFFICIENCY AS LIFEBOATMAN.

SYLLABUS.

Examinations to be conducted with a boat and equipment as specified in the Lifesaving Appliance Rules. Candidates will be required to prove that they have sufficient knowledge in the following—

- (a) The details and use of every item of equipment as required to be supplied in lifeboats.
- (b) Taking part in the preparation, swinging out and lowering of boats and to prove that they are competent to take charge of these operations.
- (c) Getting away from the ship's side in an emergency, pulling, steering and acting as Coxswain of a lifeboat. To show that they understand all the orders commonly used during the operation of boat-handling.

EIGHTH SCHEDULE.

[rule 9.]

METHODS, MARKING, SUCCESS AND FAILURE IN EXAMINATIONS.

1. Successful candidates for certificates of competency will receive an authority from the examiner addressed to the Superintendent of the Mercantile Marine Office who will issue the certificate.

2. For his written work, the candidate will be furnished with sheets of blank ruled paper on which he will be required to answer in a clear and legible hand the questions on the paper, and to start each answer by writing in the margin the number of the questions to which it relates.

3. To pass in the written portion of the examination, a candidate will be required to obtain the appropriate percentage pass in the subjects shown in the following tables and also to obtain 70 per cent of the total marks for all subjects. The time and marks allotted for each written part of the examination for each grade of certificate will be as follows—

A. TRAWLING MASTER (LIMITED).

	Time	Marks	% Pass
(1) Pilotage	3 hrs.	200	70%
(2) Navigation	2 hrs.	200	70%
		400	70%

Orals and Signals as convenient.

B. TRAWLING MASTER.

	Time	Marks	% Pass
(1) Pilotage	2½ hrs.	200	70%
(2) Practical Navigation	3 hrs.	200	70%
		400	70%

Orals and Signals as convenient.

C. SECOND MATE (FOREIGN-GOING).

	Time	Marks	% Pass
First Day.			
(1) General Ship Knowledge	3 hrs.	200	—
(2) Chart Work	2 hrs.	200	70%
Second Day.			
(3) Practical Navigation	3 hrs.	200	70%
(4) Mathematics	2 hrs.	150	50%
Third Day.			
(5) Principles of Navigation	2 hrs.	150	50%
(6) English	1½ hrs.	100	50%
		1,000	70%

Fourth or Subsequent Days — Orals and Signals.

D. FIRST MATE (FOREIGN-GOING).

	<i>Time</i>	<i>Marks</i>	<i>% Pass</i>
First Day.			
(1) Practical Navigation	3 hrs.	200	70%
(2) Chart Work	2 hrs.	150	70%
Second Day.			
(3) Ship Construction	3 hrs.	200	50%
(4) Meteorology	2 hrs.	100	—
Third Day.			
(5) Ship Maintenance	3 hrs.	200	50%
(6) Magnetism and Electricity	2 hrs.	150	—
		<u>1,000</u>	<u>70%</u>

Fourth or Subsequent Days — Orals and Signals.

E. MASTER (FOREIGN-GOING).

	<i>Time</i>	<i>Marks</i>	<i>% Pass</i>
First Day.			
(1) Practical Navigation	3 hrs.	200	70%
(2) Magnetic Compass	3 hrs.	200	50%
Second Day.			
(3) Ship Construction	3 hrs.	200	50%
(4) Shipmaster's Business	2 hrs.	150	50%
Third Day.			
(5) Engineering and Radio Aids	3 hrs.	150	—
(6) Meteorology	2 hrs.	100	—
		<u>1,000</u>	<u>70%</u>

Fourth or Subsequent Days — Orals and Signals.

PARTIAL PASSES.

4. A pass in either the written, oral or signals part of the examinations will remain valid for a period of six months, and if the candidate secures a pass in all parts during this period he will qualify for a certificate of competency. If more than six months have elapsed since the candidate passed any portion of the examination he will be required to take that portion again, although in special circumstances, this period may be extended to one year, at the discretion of the examiner.

5. Candidates failing in the oral portion of an examination for a certificate of competency through serious weakness in practical knowledge may, at the examiner's discretion, be required to perform further sea service before being re-examined. Such sea service will not exceed six months and may be performed in any capacity on deck in any sea-going ship.

6. In the case of a second or any subsequent failure in the written or oral portions of the examination for a certificate of competency, or in both such portions, two months must elapse from the date of the last failure before the

candidate may be re-examined. If a candidate has completed six months satisfactory sea service since the last failure in either or both parts the next attempt shall be treated as a final attempt within the meaning of this part.

7. Partial passes in examinations for foreign-going certificates held in the United Kingdom or other Commonwealth or Colonial examinations for certificates of competency having Imperial validity, will be accepted for examinations held in Hong Kong.

8. The certificates of competency will be issued by the country in which the examination is completed.

NON-ATTENDANCE AT ORAL EXAMINATION.

9. Candidates for any grade of certificate should proceed to the oral examination whether or not they have passed in the written portion. A candidate who does not proceed to the oral examination at the time appointed will be regarded as having failed in both portions of the examination, unless he produces to the examiner a medical certificate or other satisfactory evidence of his inability to attend the oral examination.

EXAMINATION IN SIGNALLING.

10. A candidate who is eligible by sea service for examination for any grade of certificate in which signalling is required may take this part of the examination during any week in which examinations for Masters and Mates are held within the six months immediately before and after he presents himself for examination in the written and oral portions. If the signals portion is taken separately the prescribed fee must be paid for each attempt.

CORRECTIONS BY TABLES.

11. In the Principles of Navigation paper for Second Mate (foreign-going), the correction of altitudes by total correction tables will not be allowed. Every correction must appear on the papers of the candidate.

CANDIDATES MAY USE OWN METHOD.

12. Candidates will be allowed to work out the various problems according to any method which they have been accustomed to use, provided that such method is correct in principle.

DEGREE OF PRECISION REQUIRED.

13. When making calculations for obtaining a ship's position, candidates are expected to work to 0.2 of a minute of arc and to the nearest second of time.

14. The method of calculation used in obtaining a position line should be capable of giving an answer within one nautical mile.

15. In calculation of compass errors, bearings and courses, the answer should be worked out to within 0.5 of a degree.

16. In calculating the correction to apply to soundings, it will be sufficient if the candidate's answer is within half a foot of a precise result.

COMPASS DEVIATION.

17. In answering questions on the tentative method of compass adjustment, the candidate may be tested by Beall's Compass Deviascope.

SEXTANT.

18. Particular attention will be paid to the sextant, the examination in which (for all grades) will be conducted orally and practically. Every candidate will be required to measure both vertical and horizontal angles, and will be examined practically as to his knowledge of the adjustments and the use of the various screws. He must be able to read correctly on and off the arc and to find the index error both by the horizon and by the sun.

RULE OF THE ROAD.

19. In the examination on Rule of the Road, the examiner will test the candidate's knowledge of the sense and intention of the Rules of the Collision Regulations. Mere ability to repeat the Rules word for word will not suffice to ensure the candidate's passing nor will the lack of it necessarily entail failure, provided that the examiner is satisfied that the candidate grasps the full significance, content and practical application of the Rules. Examiners will not ask for the content of the Rules by their number, but by the subject with which they deal, and they will discourage the use by candidates of verses as aids to memorizing the Rules. Examiners will not place a candidate for a steamship certificate in the position of handling a sailing ship, but will lay stress on the candidate's ability to recognize a sailing ship's lights and on his knowledge of a sailing ship's possible manoeuvres according to the direction of the wind.

NO CANDIDATE TO BE EXAMINED IN SUCCESSIVE WEEKS.

20. A candidate will not be allowed to undergo examination for the same grade of certificate twice in successive weeks, unless, in special and urgent circumstances, the examiner considers it expedient.

SIGNALLING EXAMINATION FOR CERTIFICATES OF COMPETENCY.

21. The Morse Flashing test will consist of a Test Card of 16 groups of symbols which may be letters inter-mingled with numerals and a Spelling message of 10 words.

The semaphore test will consist of a spelling message of 25 words.

22. In the Morse Flashing examination, marks will be allotted for the Test message in the proportion of 50/78 of a mark for each correct letter or numeral, and for the Spelling message 2 marks for each correct word or group of figures. In the Semaphore examination, 2 marks will be allotted for each correct word.

23. Every candidate must, for a pass, gain an aggregate of at least 90 per cent of the maximum marks allotted both in making and reading in each method, *i.e.* Morse Flashing and Semaphore.

METHOD OF SIGNALLING.

24. The Semaphore messages will be made by hand flags.

25. The Spelling message is left to the discretion of the examiner, and may be a passage from any book or newspaper in English. The message as read by the candidate will be taken down by another candidate where possible, otherwise by a clerk, or other person according as the examiner may deem expedient.

NINTH SCHEDULE.

[rules 10 & 12.]

FORM 1.

(Front of Black Cover)

(COLONY'S CREST)

CERTIFICATE
OF COMPETENCY

MASTER

(FOREIGN GOING STEAMSHIP)

(First and Second Pages)(COLONY'S
CREST)

CERTIFICATE OF COMPETENCY

AS

MASTER

No.

OF A FOREIGN-GOING STEAMSHIP

To

WHEREAS you have been found duly qualified to fulfil the duties of Master of a Foreign-going Steamship in the Merchant Service:

NOW THEREFORE, the Governor of the Colony of Hong Kong, in exercise of powers conferred by section 6 of the Merchant Shipping Ordinance 1953, and of all other powers enabling him in that behalf, hereby grants you this Certificate of Competency.

Dated this day of, 19

Countersigned

.....
*Director of Marine,
Hong Kong.*.....
Governor.

REGISTERED AT THE MARINE DEPARTMENT, HONG KONG.

(Third Page)

Signature of the person to whom this Certificate is issued

Year of Birth: NINETEEN HUNDRED AND

Place of Birth:

This Certificate is given upon an Examination passed at HONG KONG
on the day of, 19Issued at the Port of HONG KONG on the day
of, 19

..... Supt.

It is provided by section 7 of the Merchant Shipping Ordinance 1953 that every person who makes, 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; or fraudulently uses a certificate or copy of a certificate of competency which has been forged, altered, cancelled or suspended, or to which he is not entitled; or fraudulently lends his certificate of competency or allows it to be used by any other person, shall be liable to a fine of twenty thousand dollars or to imprisonment for three years; and by subsection (3) of section 52 of the same Ordinance, every master or mate whose certificate is suspended or cancelled in pursuance of that Ordinance shall, on the demand of the court, deliver his certificate to the court, or if it is not demanded by the court, deliver it to the Governor or as he directs, and in default he shall be liable to a fine of one thousand dollars.

N.B.: Any person other than the rightful holder becoming possessed of this Certificate should transmit it forthwith to the Director of Marine, Hong Kong.

(Fourth Page)

ADDITIONAL QUALIFICATIONS.

FORM 2.

(Front of Black Cover)

(COLONY'S CREST)

CERTIFICATE
OF COMPETENCY

FIRST MATE

(FOREIGN GOING STEAMSHIP)

(First and Second Pages)

CERTIFICATE OF COMPETENCY

(COLONY'S
CREST)

AS

FIRST MATE

No.

OF A FOREIGN-GOING STEAMSHIP

To

WHEREAS you have been found duly qualified to fulfil the duties of First Mate of a Foreign-going Steamship in the Merchant Service:

NOW THEREFORE, the Governor of the Colony of Hong Kong, in exercise of powers conferred by section 6 of the Merchant Shipping Ordinance 1953, and of all other powers enabling him in that behalf, hereby grants you this Certificate of Competency.

Dated this day of, 19

Countersigned

.....
Director of Marine,
Hong Kong.

.....
Governor.

REGISTERED AT THE MARINE DEPARTMENT, HONG KONG.

(Third Page)

Signature of the person to whom this Certificate is issued

Year of Birth: NINETEEN HUNDRED AND

Place of Birth:

This Certificate is given upon an Examination passed at HONG KONG on the day of, 19

Issued at the Port of HONG KONG on the day of, 19

Supt.

It is provided by section 7 of the Merchant Shipping Ordinance 1953 that every person who makes, 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; or fraudulently uses a certificate or copy of a certificate of competency which has been forged, altered, cancelled or suspended, or to which he is not entitled; or fraudulently lends his certificate of competency or allows it to be used by any other person, shall be liable to a fine of twenty thousand dollars or to imprisonment for three years; and by subsection (3) of section 52 of the same Ordinance, every master or mate whose certificate is suspended or cancelled in pursuance of that Ordinance shall, on the demand of the court, deliver his certificate to the court, or if it is not demanded by the court, deliver it to the Governor or as he directs, and in default he shall be liable to a fine of one thousand dollars.

N.B.: Any person other than the rightful holder becoming possessed of this Certificate should transmit it forthwith to the Director of Marine, Hong Kong.

(Fourth Page)

ADDITIONAL QUALIFICATIONS.

FORM 3.
(Front of Black Cover)

(COLONY'S CREST)

CERTIFICATE
OF COMPETENCY

SECOND MATE

(FOREIGN GOING STEAMSHIP)

(First and Second Pages)

CERTIFICATE OF COMPETENCY

(COLONY'S CREST)

AS

SECOND MATE

No.

OF A FOREIGN-GOING STEAMSHIP

To

WHEREAS you have been found duly qualified to fulfil the duties of Second Mates of a Foreign-going Steamship in the Merchant Service:

NOW THEREFORE, the Governor of the Colony of Hong Kong, in exercise of powers conferred by section 6 of the Merchant Shipping Ordinance 1953, and of all other powers enabling him in that behalf, hereby grants you this Certificate of Competency.

Dated this day of, 19

Countersigned

.....
*Director of Marine,
Hong Kong.*

.....
Governor.

REGISTERED AT THE MARINE DEPARTMENT, HONG KONG.

(Third Page)

Signature of the person to whom this Certificate is issued

Year of Birth: NINETEEN HUNDRED AND

Place of Birth:

This Certificate is given upon an Examination passed at HONG KONG on the day of, 19

Issued at the Port of HONG KONG on the day of, 19.....

..... Supt.

It is provided by section 7 of the Merchant Shipping Ordinance 1953 that every person who makes, 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; or fraudulently uses a certificate or copy of a certificate of competency which has been forged, altered, cancelled or suspended, or to which he is not entitled; or fraudulently lends his certificate of competency or allows it to be used by any other person, shall be liable to a fine of twenty thousand dollars or to imprisonment for three years; and by subsection (3) of section 52 of the same Ordinance, every master or mate whose certificate is suspended or cancelled in pursuance of that Ordinance shall, on the demand of the court, deliver his certificate to the court, or if it is not demanded by the court, deliver it to the Governor or as he directs, and in default he shall be liable to a fine of one thousand dollars.

N.B.: Any person other than the rightful holder becoming possessed of this Certificate should transmit it forthwith to the Director of Marine, Hong Kong.

(Fourth Page)

ADDITIONAL QUALIFICATIONS.

FORM 4.

(Front of Green Cover)

(COLONY'S CREST)

CERTIFICATE
OF COMPETENCY

TRAWLING MASTER
(LIMITED)

(First and Second Pages)

LIMITED

(COLONY'S CREST)

CERTIFICATE OF COMPETENCY

AS

TRAWLING MASTER

No.

To

WHEREAS you have been found duly qualified to fulfil the duties of Master of a Steam or Motor Trawler used for the purpose of fishing and having a registered length not exceeding one hundred and twenty feet:

NOW THEREFORE, the Governor of the Colony of Hong Kong, in exercise of powers conferred by the Merchant Shipping Ordinance 1953, and all other powers enabling him in that behalf, hereby grants you this Certificate of Competency and authorizes you to command such a vessel as aforesaid: but nothing in this Certificate shall be construed to authorize you to use any such vessel for the purposes of fishing otherwise than within waters bounded to the north by Latitude 25° North, and to the south by Latitude 15° North and to the east by Longitude 122° East.

SIGNED BY AUTHORITY OF HIS EXCELLENCY THE GOVERNOR and dated this day of, 19.....

.....
*Director of Marine,
 Hong Kong.*

REGISTERED AT THE MARINE DEPARTMENT, HONG KONG.

(Third Page)

Signature of the person to whom this Certificate is issued

Year of Birth: NINETEEN HUNDRED AND

Place of Birth:

Address of Holder:

This Certificate is given upon an Examination passed at HONG KONG on the day of, 19.....

Issued at the Port of HONG KONG on the day of, 19.....

Supt.

It is provided by section 7 of the Merchant Shipping Ordinance 1953 that every person who makes, 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; or fraudulently uses a certificate or copy of a certificate of competency which has been forged, altered, cancelled or suspended, or to which he is not entitled; or fraudulently lends his certificate of competency or allows it to be used by any other person, shall be liable to a fine of twenty thousand dollars or to imprisonment for three years; and by subsection (3) of section 52 of the same Ordinance, every master or mate whose certificate is suspended or cancelled in pursuance of that Ordinance shall, on the demand of the court, deliver his certificate to the court, or if it is not demanded by the court, deliver it to the Governor or as he directs, and in default he shall be liable to a fine of one thousand dollars.

N.B.: Any person other than the rightful holder becoming possessed of this Certificate should transmit it forthwith to the Director of Marine, Hong Kong.

(Fourth Page)

ADDITIONAL QUALIFICATIONS.

FORM 5.

(Front of Green Cover)

(COLONY'S CREST)

CERTIFICATE
 OF COMPETENCY

TRAWLING MASTER

(First and Second Pages)

CERTIFICATE OF COMPETENCY

(COLONY'S
 CREST)

AS

No.

TRAWLING MASTER

To

WHEREAS you have been found duly qualified to fulfil the duties of Master of a Steam or Motor Trawler used for the purpose of fishing:

NOW THEREFORE, the Governor of the Colony of Hong Kong, in exercise of powers conferred by the Merchant Shipping Ordinance 1953, and all other powers enabling him in that behalf, hereby grants you this Certificate of Competency and authorizes you to command such a vessel as aforesaid: but nothing in this Certificate shall be construed to authorize you to use any such vessel of which you may be in command and which does not exceed a registered length of one hundred and twenty feet for the purpose of fishing otherwise than within waters bounded to the north by Latitude 25° North and to the south by Latitude 15° North and to the east by Longitude 122° East.

SIGNED BY AUTHORITY OF HIS EXCELLENCY THE GOVERNOR and dated this day of, 19.....

.....
*Director of Marine,
 Hong Kong.*

REGISTERED AT THE MARINE DEPARTMENT, HONG KONG.

(Third Page)

Signature of the person to whom this Certificate is issued

Year of Birth: NINETEEN HUNDRED AND

Place of Birth:

This Certificate is given upon an Examination passed at HONG KONG
on the day of, 19.....Issued at the Port of HONG KONG on the day
of, 19.....

..... Supt.

It is provided by section 7 of the Merchant Shipping Ordinance 1953 that every person who makes, 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; or fraudulently uses a certificate or copy of a certificate of competency which has been forged, altered, cancelled or suspended, or to which he is not entitled; or fraudulently lends his certificate of competency or allows it to be used by any other person, shall be liable to a fine of twenty thousand dollars or to imprisonment for three years; and by subsection (3) of section 52 of the same Ordinance, every master or mate whose certificate is suspended or cancelled in pursuance of that Ordinance shall, on the demand of the court, deliver his certificate to the court, or if it is not demanded by the court, deliver it to the Governor or as he directs, and in default he shall be liable to a fine of one thousand dollars.

N.B.: Any person other than the rightful holder becoming possessed of this Certificate should transmit it forthwith to the Director of Marine, Hong Kong.

(Fourth Page)

ADDITIONAL QUALIFICATIONS.

(COLONY'S
CREST)
Issued by the
Hong Kong
Government

FORM 6.

No.

CERTIFICATE OF EFFICIENCY AS
LIFEBOATMAN

Space
for
Photograph

Name and Description of Candidate

Christian and Surname	Year of Birth	Height		No. of Discharge Book
		ft.	ins.	
Colour of		Tattoo or other Distinguishing Marks		
Eyes	Hair	Complexion		

This is to certify that the above-named seaman was examined on the day of, 19..... by an examiner appointed by the Government of Hong Kong and that he proved to the satisfaction of the examiner that he has been trained in all the operations connected with launching lifeboats and the use of oars; that he is acquainted with the practical handling of the boats themselves, and that he is capable of understanding and answering the orders relative to lifeboat service.

Signature
of Seaman }

R.H. Thumb-Print

Examiner.
} Office
Date
Stamp

FORM 7.

(Front)

No.

MAINTENANCE OF RADAR EQUIPMENT

(COLONY'S
CREST)

ON

MERCHANT SHIPS

Issued by the
Hong Kong
Government

THIS IS TO CERTIFY that
has passed an Examination in the MAINTENANCE OF RADAR EQUIPMENT
ON MERCHANT SHIPS conducted in accordance with the syllabus of the
MINISTRY OF TRANSPORT.

Signed and dated this day of, 19.....

.....
Director of Marine.

REGISTERED AT THE MARINE DEPARTMENT, HONG KONG.

(Reverse)

Name, Rank, Certificate held and Certificate No.

Discharge Book No.

Address of the person to whom this Certificate is issued

Date and Place of Birth

Signature

This Certificate is given upon an EXAMINATION passed on the
day of, 19....., at HONG KONG.

CONDITIONS.

- (1) This Certificate is personal only and not assignable. It may be cancelled, if the holder fraudulently lends or allows it to be used by any other person.
- (2) It is not statutory but is issued to show that the holder has passed an examination in the maintenance of Radar equipment in merchant ships.
- (3) It may be cancelled at any time by the Director of Marine for proved incompetency or misconduct provided that the holder has been first informed in writing of the nature of the incompetency or misconduct alleged against him and has been given an opportunity of showing cause why it should not be cancelled.

N.B.: Any person other than the rightful holder thereof becoming possessed of this Certificate should transmit it forthwith to the Director of Marine, Hong Kong.

ISSUED AT THE MARINE DEPARTMENT, HONG KONG,
on the day of, 19.....

FORM 8.

RADAR OBSERVER

ON

MERCHANT SHIPS

No.

This is to certify that

Name

Rank

Certificate of Competency, Grade No. Discharge Book No.

Date and Place of Birth

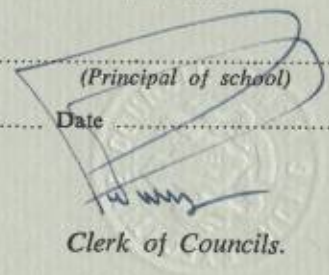
completed a course of training in Radar Observation, approved by the Director of Marine, Hong Kong, held from, 19.....

to, 19....., at
(Name of school)

and passed the examination held by the School Authorities at the conclusion of the course.

Signed
(Examiner)Signed
(Principal of school)

Signature of Holder Date



Clerk of Councils.

COUNCIL CHAMBER,
29th June, 1965.

Explanatory Note.

(This Note is not part of the rules, but is intended to indicate their general purport).

These rules make comprehensive provision for the conduct of examinations for and the issue in Hong Kong of certificates of competency in respect of Masters, Mates and Second Mates of foreign-going merchant ships and in respect of Trawling Masters and Trawling Masters (Limited) of trawlers operating from Hong Kong. The rules also include provision for the examinations for and issue of certificates in respect of certain other qualifications relating to service in merchant ships which can be issued in Hong Kong.

2. Certificates of competency as Extra Master and United Kingdom home trade certificates of competency are not issued in Hong Kong but the examinations for those certificates can be invigilated here in any particular case by arrangement with the Minister of Transport and the respective certificates issued thereafter by the Minister.

(Secretariat GR17/3231/53)

MERCHANT SHIPPING ORDINANCE 1953.

(No. 14 of 1953).

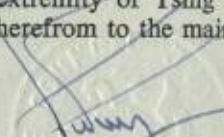
MERCHANT SHIPPING (LIFE SAVING APPLIANCES)
(AMENDMENT) REGULATIONS 1965.

In exercise of the powers conferred by section 37 of the Merchant Shipping Ordinance 1953, the Governor in Council has made the following regulations—

1. These regulations may be cited as the Merchant Shipping (Life Saving Appliances) (Amendment) Regulations 1965, and shall come into operation on the day appointed for the commencement of the Merchant Shipping (Amendment) Ordinance 1965. Citation and commencement.
(17 of 1965).
2. The Merchant Shipping (Life Saving Appliances) Regulations 1961 (hereinafter referred to as the principal regulations) are amended by the deletion from the heading thereto of the word and figures "TABLE 10". Amendment of heading to principal regulations.
(G.N.A. 14/61).
3. Regulation 1 of the principal regulations is amended by the deletion of the words and figures "and referred to as Table 10, and shall come into operation on a day to be appointed by the Governor by Proclamation in the *Gazette*" and the substitution therefor of the following—
(17 of 1965). Amendment of regulation 1.
"and shall come into operation on the day appointed for the commencement of the Merchant Shipping (Amendment) Ordinance 1965".
4. Regulation 13 of the principal regulations is amended, in subparagraph (b) of paragraph (2), by the deletion of the words "as the case may be". Amendment of regulation 13.
5. The Fifth Schedule to the principal regulations is amended by the deletion of the description of the Victoria Harbour Area and the substitution therefor of the following—
"The waters contained within the following boundaries—
On the east—A straight line drawn from the westernmost extremity of Siu Chau Wan Point to the westernmost extremity of A Kung Ngam Point (sometimes known as Kung Am);
On the west—A straight line drawn from the westernmost point of the Island of Hong Kong to the westernmost point of Green Island, thence a straight line drawn from the westernmost point of Green Island to the easternmost point of Tsing Yi Rock, thence a



straight line drawn true north from the easternmost point of Tsing Yi Rock to Tsing Yi, thence along the eastern and northern coast lines of Tsing Yi to the westernmost extremity of Tsing Yi and thence a straight line drawn true north therefrom to the mainland."


Clerk of Councils.

COUNCIL CHAMBER,
29th June, 1965.

Explanatory Note.

(This Note is not part of the regulations, but is intended to indicate their general purport).

Since the Merchant Shipping (Life Saving Appliances) Regulations 1961 (the principal regulations) were enacted, the Victoria Harbour area has been extended. The main object of these amending regulations is to bring up to date the description of the Victoria Harbour Area in the Fifth Schedule to the principal regulations.

The Merchant Shipping (Amendment) Ordinance 1965 abolishes the necessity for publishing regulations under the Merchant Shipping Ordinance 1953 in the form of Tables. Accordingly, the references to Table 10 are deleted from the principal regulations.

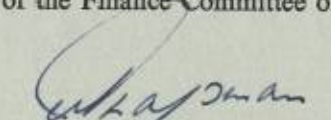
(Secretariat GR 17/3231/53)

THE LOTTERIES FUND.

Resolution made and passed by the Legislative Council on the 30th day of June, 1965.

Resolved—

1. that with effect from the 30th day of June, 1965, there shall be established a fund styled the LOTTERIES FUND;
2. that the Fund or any part of it may be held in Hong Kong dollars or in sterling and shall be administered by the Financial Secretary and may be invested in such securities as may be approved by him;
3. that there shall be credited to the Fund—
 - (a) a sum of \$7,418,920 to be appropriated from the general revenue of the Colony with effect from the date of creation of the Fund;
 - (b) such appropriations from the general revenue of the Colony as may from time to time be made by this Council;
 - (c) such sums as may be required by or under any Ordinance to be credited thereto;
 - (d) all sums received by way of repayment of loans or advances granted from the Fund;
 - (e) all sums received by way of interest or dividend on investments, deposits, loans or advances of the Fund;
 - (f) such donations as may be offered to the Fund and which have been approved by the Finance Committee of this Council;
4. that the Financial Secretary may from time to time appropriate from the Fund monies for the purpose of financing by way of a grant, a loan or an advance the support and development of such social welfare services in the Colony as may be approved by the Governor, after receiving and giving consideration to the advice of the Social Welfare Advisory Committee, provided that the amount of any appropriation, and the terms and conditions of the grant, loan or advance, shall in every case be subject to the prior approval of the Finance Committee of this Council.


Deputy Clerk of Councils.

COUNCIL CHAMBER,
30th June, 1965.

(Secretariat CR15/3371/60^{II})

91

STAMP ORDINANCE.

(Chapter 117).

STAMP (BANK AUTHORIZATION) (NO. 2) ORDER 1965.

In exercise of the power vested in me by section 15 of the Stamp Ordinance, I hereby make the following Order—

ORDER.

1. This Order may be cited as the Stamp (Bank Authorization) Citation. (No. 2) Order 1965.

2. The bank specified in the Schedule to this Order is hereby authorized to compound for the payment of duty on unstamped cheques subject to the conditions stated in paragraphs (a), (b) and (c) of subsection (1) of section 15 of the Ordinance.

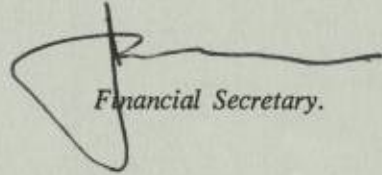
Specified bank authorized to compound for the payment of certain duty.

SCHEDULE.

Po Sang Bank, Limited.

23rd June, 1965.

(Secretariat FIN18/2321/49)



Financial Secretary.

RESETTLEMENT ORDINANCE 1958.

(No. 16 of 1958).

RESETTLEMENT (AMENDMENT) (NO. 3) REGULATIONS 1965.

In exercise of the powers conferred by section 51 of the Resettlement Ordinance 1958, the Governor in Council has made the following regulations—

1. These regulations may be cited as the Resettlement (Amendment) (No. 3) Regulations 1965, and shall come into operation on the 2nd day of July, 1965. Citation and commencement.

2. The Second Schedule to the Resettlement Regulations 1958 is amended in Part III— Amendment of Second Schedule.

(a) by the insertion in item 1, in the column headed "Accommodation", after "San Po Kong Resettlement.", of the following— (G.N.A. 49/58).

"Factory Blocks Nos. 1, 2, 3 and 4";

(b) by the insertion in item 3, in the column headed "Accommodation", after "Resettlement Factories other than the above.", of the following—

"Class 1—blocks of 5 storeys or less"; and

(c) by the insertion in item 3, at the end thereof in the appropriate columns as shown hereunder, of the following—

"Class 2—7 storey blocks

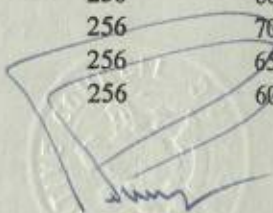
(a) Hong Kong Island, Kowloon and New Kowloon

Ground floor	256	140.00
First floor	256	115.00
Second floor	256	100.00
Third floor	256	85.00
Fourth floor	256	75.00
Fifth floor	256	70.00
Sixth floor	256	65.00

(b) New Territories other than New Kowloon

Ground floor	256	133.00
First floor	256	110.00
Second floor	256	95.00

Third floor	256	80.00
Fourth floor	256	70.00
Fifth floor	256	65.00
Sixth floor	256	60.00".



Clerk of Councils.

COUNCIL CHAMBER,
29th June, 1965.

Explanatory Note.

(This Note is not part of the regulations, but is intended to indicate their general purport).

The purpose of these regulations is to prescribe rents for factory premises in a new class of seven storey factory blocks.

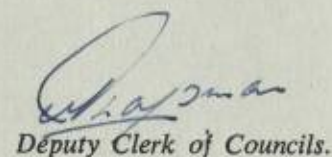
(Secretariat BL4/4803/62 TC207/63)

LEGISLATIVE COUNCIL RESOLUTION.

EDUCATION POLICY.

Resolution made and passed by the Legislative Council on the 30th day of June, 1965.

Resolved that the White Paper on Education Policy be adopted as a basis for future action subject to the modifications proposed by the Director of Education in his speech to Council on 30th June, 1965, it being understood that this resolution does not imply the taking of any decision on salaries and terms of service or on any other matter on which Government has expressed reservations in Appendix I to the White Paper.



Deputy Clerk of Councils.

COUNCIL CHAMBER,
30th June, 1965.

(Secretariat CR8/2041/50III)

99

LEGISLATIVE COUNCIL.

BANK NOTES ISSUE ORDINANCE.

(Chapter 65).

Resolution made and passed by the Legislative Council on the 7th day of July, 1965.

Resolved, pursuant to the proviso to section 5 of the Bank Notes Issue Ordinance, Chapter 65, that this Council hereby extends the powers of all the note-issuing banks to make, issue or re-issue and circulate notes until and including the 12th day of July, 1966.



Deputy Clerk of Councils.

COUNCIL CHAMBER,
7th July, 1965.

(Secretariat FR52/2524/45)

95

UNIVERSITY ORDINANCE 1958.

(No. 13 of 1958).

**STATUTES OF THE UNIVERSITY (AMENDMENT)
STATUTES 1965.**

In exercise of the powers conferred by subsection (2) of section 14 of the University Ordinance 1958, the Chancellor of the University of Hong Kong has made the following statute—

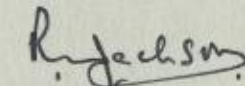
1. These statutes may be cited as the Statutes of the University Citation. (Amendment) Statutes 1965.

2. Paragraph 2 of statute III of the Statutes of the University is amended by the addition, at the end thereof, of the following—
Certificates in engineering subjects, as determined by the Senate from time to time.

Amendment of Statute III. (Schedule to Ord. 13 of 1958).

3. Statute IV of the Statutes of the University is amended by the insertion, after the words "the undergraduates." of the following—
In addition, such persons holding such offices of appointments at or made by the University as shall hereafter from time to time be determined by the Council, shall be members of the University.

Amendment of Statute IV. (Schedule to Ord. 13 of 1958).


Acting Registrar.

16th July, 1965.

96
STAMP ORDINANCE.

(Chapter 117).

STAMP (BANK AUTHORIZATION) (NO. 3) ORDER 1965.

In exercise of the power vested in me by section 15 of the Stamp Ordinance, I hereby make the following Order—

ORDER.

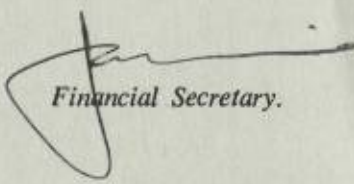
1. This Order may be cited as the Stamp (Bank Authorization) Citation. (No. 3) Order 1965.

2. The bank specified in the Schedule to this Order is hereby authorized to compound for the payment of duty on unstamped cheques subject to the conditions stated in paragraphs (a), (b) and (c) of subsection (1) of section 15 of the Ordinance.

Specified bank authorized to compound for the payment of certain duty.

SCHEDULE.

Union Bank, Limited.



Financial Secretary.

19th July, 1965.

(Secretariat FIN18/2321/49)

ROAD TRAFFIC ORDINANCE 1957.
(No. 39 of 1957).

ROAD TRAFFIC (CONSTRUCTION AND USE) (AMENDMENT)
REGULATIONS 1965.

In exercise of the powers conferred by section 3 of the Road Traffic Ordinance 1957, the Governor in Council has made the following regulations—

1. These regulations may be cited as the Road Traffic (Construction and Use) (Amendment) Regulations 1965. Citation.

2. Regulation 28 of the Road Traffic (Construction and Use) Regulations 1956 (hereinafter referred to as the principal regulations) is revoked and replaced by the following— Revocation and replacement of regulation 28.

"Overhang.

28. (1) The overhang of a motor vehicle, other than a goods vehicle which exceeds two tons in weight unladen or an omnibus, shall not exceed fifty per cent of the distance between the plane perpendicular to the longitudinal axis of the vehicle which passes through the centre or centres of the front wheel or wheels and the foremost vertical plane from which the overhang is to be measured.

(G.N.A. 106/56).

(2) The overhang of a goods vehicle which exceeds two tons in weight unladen or an omnibus shall not exceed sixty per cent of the distance between the plane perpendicular to the longitudinal axis of the vehicle or omnibus which passes through the centre or centres of the front wheel or wheels and the foremost vertical plane from which the overhang is to be measured."

3. Regulation 38 of the principal regulations is amended by— Amendment of regulation 38.

(a) being renumbered as paragraph (1) thereof;

(b) the deletion from the proviso of "seventy feet" and the substitution therefor of the following—

"seventy-six feet, if the omnibus has a swept circle not exceeding eighty feet in diameter"; and

(c) the insertion of the following new paragraph—

"(2) In this regulation, the expression "swept circle" means the circle traced at ground level by a vertical line passing through any part of the omnibus included in the overall length and overall width of the omnibus."

Revocation
of regulation
85A.

4. Regulation 85A of the principal regulations is revoked.



COUNCIL CHAMBER,
27th July, 1965.

Explanatory Note.

(This Note is not part of the regulations, but is intended to indicate their general purport).

Regulation 2 of these regulations amends regulation 28 of the Road Traffic (Construction and Use) Regulations 1956 (the principal regulations) so as to increase the permitted amount of overhang in the case of omnibuses and heavy goods vehicles. The permitted amount of overhang in the case of omnibuses and heavy goods vehicles was increased in the United Kingdom in 1963 and vehicles are now being constructed to the new standard. It is considered that the use on the Colony's roads of vehicles with the increased overhang will not lead to any undue obstruction of the traffic flow or to any increased danger to road users.

Regulation 3 amends regulation 38 of the principal regulations so as to empower the Commissioner of Police to permit the use of an omnibus with a turning circle of seventy-six feet, instead of seventy feet, if the swept circle for the omnibus does not exceed eighty feet in diameter. This amendment will enable the Commissioner of Police to permit larger buses, with a consequently greater carrying capacity, to be used in Hong Kong.

Regulation 85A of the principal regulations was intended to require every rickshaw to have thereon a notice stating the prescribed fee for the use of the rickshaw. In fact, fees for the use of rickshaws were revoked by the Road Traffic (General) Regulation 1961. Consequently, regulation 85A has become redundant and is therefore revoked.

(Secretariat GR44/3231/55II)

ROAD TRAFFIC (CONSTRUCTION AND USE)
REGULATIONS 1956.
(G.N.A. 106/56).

ROAD TRAFFIC (CONSTRUCTION AND USE) (GUY ARAB
MARK V OMNIBUSES EXEMPTION) ORDER 1965.

WHEREAS, under regulation 38 of the Road Traffic (Construction and Use) Regulations 1956, the use of an omnibus with a turning circle exceeding seventy-six feet may not be authorized:

AND WHEREAS the omnibuses specified in the Schedule have a turning circle exceeding seventy-six feet:

AND WHEREAS the Governor in Council is satisfied that it is in the public interest that provision should be made so as to permit the said omnibuses to be used on routes and at times specified by or on behalf of the Commissioner of Police:

AND WHEREAS the Governor in Council considers that it is in the public interest that the said omnibuses should be exempted from the provisions of regulation 38 of the Road Traffic (Construction and Use) Regulations 1956:

NOW, THEREFORE, in exercise of the powers conferred by regulation 6A of the Road Traffic (Construction and Use) Regulations 1956, the Governor in Council has made the following Order—

1. This Order may be cited as the Road Traffic (Construction and Use) (Guy Arab Mark V Omnibuses Exemption) Order 1965. Citation.

2. The vehicles having the engine numbers and chassis numbers specified in the Schedule are exempted from the provisions of regulation 38 of the Road Traffic (Construction and Use) Regulations 1956. Exemption.
(G.N.A. 106/56).

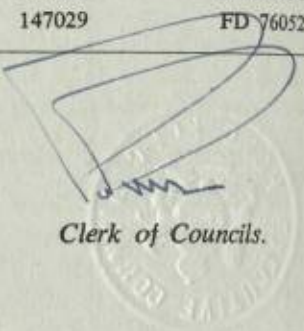
SCHEDULE.

[reg. 2.]

EXEMPTED VEHICLES.

Item.	Type of omnibus.	Engine number.	Chassis number.
1.	Guy Arab Mark V omnibus	145474	FD 75947
2.	Guy Arab Mark V omnibus	145511	FD 75953
3.	Guy Arab Mark V omnibus	145512	FD 75946
4.	Guy Arab Mark V omnibus	145666	FD 75955
5.	Guy Arab Mark V omnibus	146202	FD 75993

<i>Item.</i>	<i>Type of omnibus.</i>	<i>Engine number.</i>	<i>Chassis number.</i>
6.	Guy Arab Mark V omnibus	146685	FD 76034
7.	Guy Arab Mark V omnibus	146870	FD 76048
8.	Guy Arab Mark V omnibus	146871	FD 76049
9.	Guy Arab Mark V omnibus	146872	FD 76050
10.	Guy Arab Mark V omnibus	147029	FD 76052



Clerk of Councils.

COUNCIL CHAMBER,
27th July, 1965.

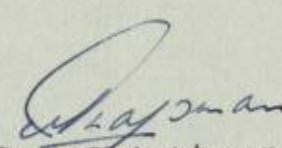
(Secretariat GR44/3231/55II)

INLAND REVENUE ORDINANCE.

(Chapter 112).

Resolution made and passed by the Legislative Council under section 85 of the Inland Revenue Ordinance on the 28th day of July, 1965.

Resolved, pursuant to section 85 of the Inland Revenue Ordinance, that the Inland Revenue (Amendment) Rules 1965, made by the Board of Inland Revenue on the 9th day of July, 1965 under section 85 of that Ordinance, be approved.



Deputy Clerk of Councils.

COUNCIL CHAMBER,
28th July, 1965.

(Secretariat FR2/2301/47V)

INLAND REVENUE ORDINANCE.

(Chapter 112).

INLAND REVENUE (AMENDMENT) RULES 1965.

In exercise of the powers conferred by section 85 of the Inland Revenue Ordinance, We, the Board of Inland Revenue, hereby make the following rules—

1. These rules may be cited as the Inland Revenue (Amendment) Rules 1965, and shall apply to assessments for the year of assessment commencing on the 1st day of April, 1965 and subsequent years of assessment. Citation and application.

2. Rule 2 of the Inland Revenue Rules (hereinafter referred to as the principal rules) is revoked and replaced by the following new rule— Revocation and replacement of rule 2.

"Rates of depreciation.

2. (1) For the purpose of the Ordinance, the expression "machinery or plant" shall include or be deemed to include the items specified in the second column of the First Part of the Table annexed to this rule but not the items specified in the second column of the Second Part of that Table which shall be deemed to be included in the expression "any implement, utensil and article" for the purposes of the Ordinance.

(Vol. IX, p. 356).

(2) The rates of depreciation specified in the third column of the First Part of the Table annexed to this rule are hereby prescribed for the purpose of ascertaining the annual allowance to be made under subsection (2) of section 37 and subsection (2) of section 37A of the Ordinance.

(3) Wharves shall not be or be deemed to be included in the expression "plant or machinery" but where a balancing allowance or a balancing charge falls to be made to or on any person under section 35 of the Ordinance in respect of any wharf, the allowances, if any, granted in respect of such wharf under section 37 or 37A of the Ordinance for any year of assessment prior to the year of assessment commencing on the 1st day of April, 1965, shall be taken into account in calculating such balancing allowance or charge.

TABLE.

FIRST PART.

<i>Item.</i>	<i>Rate of Depreciation.</i>
1. Machinery or plant not itemized below	10%
2. Air-conditioning plant	10%
3. Aircraft (including engines)	30%

<i>Item.</i>	<i>Rate of Depreciation.</i>
4. Amusement Park equipment	10%
5. Artificial limb making machinery	10%
6. Bank safe deposit boxes, doors and grills	10%
7. Bar syphon apparatus	20%
8. Bicycles	20%
9. Bleaching and finishing machinery and plant ...	15%
10. Bottling and bottle-washing machinery	10%
11. Brewing and distilling plant and machinery	10%
12. Broadcasting transmitters	10%
13. Billiard tables	10%
14. Boilers, steam engines and shafting	10%
15. Book-binding machinery and plant	10%
16. Cables (electric)	5%
17. Chemical machinery and plant—	
Sulphuric and nitric acid plant	15%
Other plant	10%
18. Cinemas and Photographers—	
Projectors, Cameras and photographic pro-	
cessing equipment	15%
Seating	10%
19. Copper stills—distillery	10%
20. Concrete pipe moulds	20%
21. Diesel engines	10%
22. Domestic appliances—	
Electric cookers and kettles	20%
Gas cookers and fires	15%
Electric refrigerators, water heaters, washing	
machines and boilers	15%
Room air-conditioning units	15%
Other gas and electric domestic appliances.	10%
23. Electric motors, dynamos and other electrical	
plant	10%
24. Electronic data equipment	20%
25. Foundry plant	10%
26. Furnaces—	
Electric	15%
Other	10%
27. Furniture (Excluding soft furnishings)	10%
28. Grill equipment	5%
29. Lamp standards (street)—gas or electric	5%
30. Laundry machinery and plant—	
General rate	10%
Electric washing machines and boilers	15%
31. Lifts and escalators (electric)	10%

<i>Item.</i>	<i>Rate of Depreciation.</i>
32. Mains (Gas or Water)	5%
33. Meters (gas or electric)	10%
34. Microscopic equipment	10%
35. Motor Vehicles—	
Petrol driven	25%
Oil driven	20%
Taxi meters	10%
36. Neon Signs	10%
37. Oil tanks	5%
38. Plastic manufacturing machinery and plant	15%
39. Plastic moulds	15%
40. Pottery manufacturing and brick-making	
machinery and plant	10%
41. Printing machinery	10%
42. Pumps and motors	10%
43. Pianos	5%
44. Refrigerating and ice manufacturing machinery	
and plant	10%
45. Saw-milling machinery and plant	10%
46. Scales and gears	10%
47. Show cases	10%
48. Shipping—	
Ships—Steel	5%
—Wooden (including junks and	
sampans)	10%
Launches—Motor	15%
—Steam	10%
Outboard Motors	25%
Lighters—Steel	5%
—Wooden	10%
Steam winches	10%
Tugs	10%
49. Silk manufacturing machinery and plant	15%
50. Sprinklers	5%
51. Steam engines	10%
52. Tank lorries	30%
53. Textile and clothing manufacturing machinery	
and plant	15%
54. Tractors—Bull dozers and graders	25%
55. Trailers	10%
56. Tramway rolling stock	10%
57. Type and blocks (if not dealt with on renewals	
basis)	15%
58. Weaving knitting and sewing machinery	15%
59. X-ray and infra-red machine (excluding tubes) ...	10%

SECOND PART.

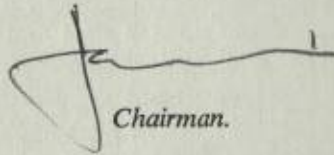
Item.

1. Belting.
2. Crockery and cutlery.
3. Kitchen utensils.
4. Linen.
5. Loose tools.
6. Soft furnishings (including curtains and carpets).
7. Surgical and dental instruments.
8. Tubes for X-ray and infra-red machines."

Amendment
of rules
3 and 5.

3. Paragraph (3) of rule 3 and paragraph (2) of rule 5 of the principal rules are amended by the insertion, after the words "subject to" in the proviso to each of those paragraphs, of the following—
"objection and".

Made by the Board of Inland Revenue this 9th day of July, 1965.



Chairman.

P. C. Woo,
Member.

J. B. Hart,
Member.

H. Wardle,
Member.

Explanatory Note.

(This Note is not part of the rules but is intended to indicate their general purport).

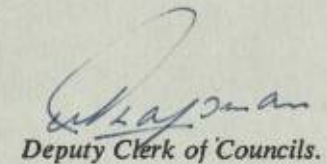
These rules replace rule 2 of the Inland Revenue Rules by a new rule and Table which, first, indicates what is, for the purpose of the Ordinance, included in the expression "plant or machinery" (for which initial and annual depreciation allowances are granted) and in the expression "any implement, utensil and article" (for which any expenditure incurred in replacement may be deducted); and secondly, specifies, with some increases, the rates of depreciation allowable for items constituting "plant or machinery".

(Secretariat FR2/2301/47V)

PUBLIC HEALTH AND URBAN SERVICES ORDINANCE 1960.
(No. 30 of 1960).

Resolution made and passed by the Legislative Council under section 144 of the Public Health and Urban Services Ordinance 1960 on the 28th day of July, 1965.

Resolved, pursuant to section 144 of the Public Health and Urban Services Ordinance 1960, that the Frozen Confections (Amendment) By-laws 1965, made by the Urban Council under section 56 of the said Ordinance on the 6th day of July, 1965, be approved.



Deputy Clerk of Councils.

COUNCIL CHAMBER,
28th July, 1965.

(Secretariat GR5/3231/60^{II})

PUBLIC HEALTH AND URBAN SERVICES ORDINANCE 1960.
(No. 30 of 1960).

FROZEN CONFECTIONS (AMENDMENT) BY-LAWS 1965.

In exercise of the powers conferred by section 56 of the Public Health and Urban Services Ordinance 1960, the Urban Council has made the following by-laws—

1. These by-laws may be cited as the Frozen Confections (Amendment) By-laws 1965. Citation.

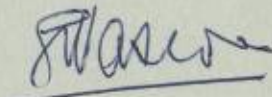
2. By-law 21 of the Frozen Confections By-laws 1960 (hereinafter referred to as the principal by-laws) is amended by the deletion of paragraph (2) and the substitution therefor of the following— Amendment
of by-law 21.
(G.N.A.
105/60).

“(2) The licensee shall not subject any mixture to heat treatment unless the apparatus used is of a type approved by the Council.”

3. Paragraph (3) of the First Schedule to the principal by-laws is amended by the deletion of the full stop and the substitution therefor of the following— Amendment
of First
Schedule.

“and shall be equipped with an automatic device to divert the flow of any mixture which has not been retained at the requisite temperature for the requisite period of time.”

Made by the Urban Council this 6th day of July, 1965.



Secretary.

(Secretariat GR5/3231/60¹¹)