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GOVERNMENT NOTICE.

The following Government Notice is published for general information:—

DEPARTMENT OF CUSTOMS AND EXCISE.

* No. 2388.] [28 December 1956.
MARINE SECTION.

The following draft regulations proposed to be made under the provisions of section three hundred and fifty-six (1) of the Merchant Shipping Act, 1951 (Act No. 57 of 1951), are hereby published for general information. Any person who wishes to make any comments or suggestions may submit them to the Commissioner of Customs and Excise, Marine Section, P.O. Box 376, Pretoria, on or before the 30th June, 1957.

These regulations cover—

- (a) the scope and conduct of examinations to be passed by a person desiring the grant under the Merchant Shipping Act, 1951 (Act No. 57 of 1951), of a certificate of competency as—
 - (i) second navigating officer of a foreign-going ship;
 - (ii) chief navigating officer of a foreign-going ship;
 - (iii) master of a foreign-going ship;
 - (iv) navigating officer of a coasting ship of one hundred or more gross register tons; or
 - (v) master of a coasting ship of one hundred or more gross register tons;
- (b) the age and qualifications of the candidates, including the service at sea and other service which they must have performed and the training which they must have undergone;
- (c) the fees to be paid by the candidates for examination; and
- (d) the forms and other documents relating to such examinations and certificates and the particulars to be contained therein.

*Alle Proklamasies, Goewerments- en Algemene Kennisgewings, wat vir die eerste maal gepubliseer word, is in die linker-bohoek met 'n * gemerk.*

GOEWERMENSKENNISGEWING.

Onderstaande Goewermentskennisgewing word vir algemene inligting gepubliseer:—

DEPARTEMENT VAN DOEANE EN AKSYNS.

* No. 2388.] [28 Desember 1956.
MARINE-AFDELING.

Onderstaande ontwerp-regulasies, voorgestel om kragtens die bepalings van artikel drie-honderd ses-en-veertig (1) van die Handelskeepvaartwet, 1951 (Wet No. 57 van 1951), uitgevaardig te word, word hierby vir algemene inligting gepubliseer. Persone wat begeer om kommentaar te lewer of aanbevelings te maak kan hulle aan die Kommissaris van Doeane en Aksyns, Marine-afdeling, Posbus 376, Pretoria, op of voor 30 Junie 1957, deurstuur.

Hierdie regulasies dek—

- (a) die veld en afneem van eksamens waarin 'n persoon moet slaag wat die toekenning kragtens die Handelskeepvaartwet, 1951 (Wet No. 57 van 1951), van 'n bekwaamheidsertifikaat verlang, as—
 - (i) tweede navigasie-offisier van 'n skip op vreemde vaart;
 - (ii) hoof-navigasie-offisier van 'n skip op vreemde vaart;
 - (iii) gesagvoerder van 'n skip op vreemde vaart;
 - (iv) navigasie-offisier van 'n kusvaarder van honderd of meer bruto-registerton; of
 - (v) gesagvoerder van 'n kusvaarder van honderd of meer bruto-registerton;
- (b) die ouderdom en kwalifikasies van die kandidate, asook hul diens ter see en ander diens wat hulle moet verrig het en die opleiding wat hulle moet ondergaan het;
- (c) die eksamengelde wat deur kandidate betaal moet word; en
- (d) die vorms en ander dokumente met betrekking tot sodanige eksamens en sertifikate en die besonderhede wat daarin vervat moet word.

CONTENTS.

Preamble.

CHAPTER I.

GENERAL.

1. Title of these Regulations.
2. Interpretation.
3. Director to Determine Eligibility.
4. Proof of Nationality.
5. Places of Examination.
6. Form of Application.
7. Other Documents to be Submitted.
8. Consideration of Doubtful Cases.
9. Enquiries.
10. Testimonials.
11. Deafness and Other Physical and Mental Disabilities.
12. Service Found to be Insufficient.
13. Copies of Lost Certificates.
14. First Aid Certificates.
15. Colour and Form Vision Tests.
16. Misconduct by Candidates.

CHAPTER II.

AGE LIMITS AND QUALIFICATIONS REQUIRED FOR
CERTIFICATES OF COMPETENCY.

17. Second Navigating Officer of a Foreign-going Ship.
18. Chief Navigating Officer of a Foreign-going Ship.
19. Master of a Foreign-going Ship.
20. Navigating Officer of a Coasting Ship of one Hundred or More Gross Register Tons.
21. Master of a coasting Ship of One Hundred or More Gross Register Tons.
22. Comparative Value of Certificates.

CHAPTER III.

HOW SEA SERVICE IS CALCULATED.

23. General.
24. Nature and Period of Service Determined by Reference to Agreement with the Crew.
25. What Proportion of Time Spent on Long and Short Voyages Respectively may be Accepted.
26. Certificates of Watch-keeping Service.
27. Promotion During Voyage.
28. Mixed Service.
29. Evidence as to Service in Ships Other than South African Ships.
30. Service as Cook, etc.
31. Service as Radio Officer.
32. Apprentice-officers (Deck).
33. Cadets.
34. Promotion During the Service of an Apprentice-officer or Cadet.
35. Training Establishments.
36. Service in Fishing Vessels.

CHAPTER IV.

SUCCESS OR FAILURE IN EXAMINATION.

37. Percentage Pass.
38. Partial Pass.
39. Time that must Elapse between Failure in Written Portion of Examination and Re-examination.

INHOUD.

Inleiding.

HOOFSTUK I.

ALGEMEEN.

1. Opskrif van hierdie regulasies.
2. Woordbetekenis.
3. Direkteur moet benoembaarheid van kandidate vasstel.
4. Bewys van nasionaliteit.
5. Plekke waar eksamens gehou word.
6. Aansoekvorm.
7. Ander dokumente wat voorgelê moet word.
8. Oorweging van twyfelagtige gevalle.
9. Inligting.
10. Getuigskrifte.
11. Doofheid en ander liggaams- of geestesgebreke.
12. Onvoldoende dienstyl.
13. Afskrifte van verlore sertifikate.
14. Eerstehulpsertifikate.
15. Gesigstoetse vir kleur en vorm.
16. Wangedrag van kandidate.

HOOFSTUK II.

OUDERDOMSGRENS EN VEREISTE KWALIFIKASIES
VIR BEKWAAMHEIDSERTIFIKATE.

17. Tweede navigasie-offisier van 'n skip op vreemde vaart.
18. Hoof-navigasie-offisier van 'n skip op vreemde vaart.
19. Gesagvoerder van 'n skip op vreemde vaart.
20. Navigasie-offisier van 'n kusvaarder van honderd of meer bruto-registerton.
21. Gesagvoerder van 'n kusvaarder van honderd of meer bruto-registerton.
22. Vergelykende waarde van sertifikate.

HOOFSTUK III.

HOE SEEDIENS BEREKEN WORD.

23. Algemeen.
24. Aard en tydperk van diens word bepaal deur raadpleging van ooreenkoms met die bemanning.
25. Diens in kusvaarders.
26. Waghoudienssertifikate.
27. Promosie gedurende seereis.
28. Gemengde diens.
29. Bewys aangaande diens in skepe uitgesonderd Suid-Afrikaanse skepe.
30. Diens as kok, ens.
31. Diens as radio-offisier.
32. Leerling-offisiere (Dek).
33. Kadette.
34. Promosie gedurende die diens van 'n leerling-offisier of kadet.
35. Opleidingsinrigtings.
36. Diens in vissersbote.

HOOFSTUK IV.

SLAAG OF DRUIP IN EKSAMENS.

37. Slaagpersentasie.
38. Slaag in gedeelte van eksamen.
39. Tyd wat moet verstryk tussen druipe in skriftelike gedeelte van eksamen en hereksamen.

CHAPTER V.

CONDUCT OF EXAMINATION.

40. Candidates to be Punctual.
41. No Strangers Admitted.
42. Loose Papers and Books.
43. Use of Books and Tables at the Examinations.
44. Use of Instruments.
45. Unauthorised Books and Papers Strictly Forbidden.
46. Damage to Books, Instruments, etc.
47. Leaving Room.
48. Silence.
49. All Work to be Shown.
50. Penalty for Copying, etc.
51. Candidates may Use Own Method.
52. Degree of Precision Required.
53. Corrections by Tables.
54. Compass Deviation.
55. Sextant.
56. Rule of the Road.
57. Non-attendance at Oral Examinations.
58. Examination in Signalling.
59. Penalty for Breach of Regulations.

CHAPTER VI.

EXAMINATIONS FEES.

60. When to Pay Fees.
61. Where to Pay Fees.
62. Table of Fees.
63. Refund of Fees.

CHAPTER VII.

ISSUE OF CERTIFICATES.

64. Authority for Delivery of Certificates of Competency.
65. Issue of Certificate of Competency as Navigating Officer or Master.

CHAPTER VIII.

CERTIFICATES OF SERVICE.

66. How Application Should be Made.

CHAPTER IX.

SYLLABUSES.

67. General.

ANNEXURES.

- Annexure A.—List of Forms Appearing in these Regulations.
- Annexure B.—Colour and Form Vision Tests.
- Annexure C.—International Regulations for Preventing Collisions at Sea, 1948.
- Annexure D.—Syllabuses for Examinations.

CHAPTER I.

GENERAL.

TITLE OF THESE REGULATIONS.

1. These regulations are called the Examination Regulations for Masters and Navigating Officers.

INTERPRETATION.

2. In these regulations, unless the context indicates otherwise—
(1) "examiner" means the person appointed as such in terms of sub-section (4) of section *seventy-seven* of the Merchant Shipping Act, 1951;

HOOFSTUK V.

HOU VAN EKSAMENS.

40. Kandidate moet stip op tyd wees.
41. Geen vreemdelinge word toegelaat nie.
42. Los velle papier en boeke.
43. Gebruik van boeke en tafels by eksamens.
44. Gebruik van instrumente.
45. Ongemagtigde boeke en geskifte streng verbode.
46. Skade aan boeke, instrumente, ens.
47. Uitgaan uit kamer.
48. Stilte.
49. Werk moet vertoon word.
50. Straf vir afskryf, ens.
51. Kandidate mag eie metode volg.
52. Verlangde graad van juistheid.
53. Korreksies volgens tafels.
54. Kompas-deviasie.
55. Sekstant.
56. Padverkeersreël.
57. Afwesigheid by mondelinge eksamens.
58. Eksamen in seine.
59. Straf vir oortreding van regulasies.

HOOFSTUK VI.

EKSAMENGELDE.

60. Wanneer betaalbaar.
61. Waar betaalbaar.
62. Tabel van eksamengelde.
63. Terugbetaling van eksamengelde.

HOOFSTUK VII.

UITREIKING VAN SERTIFIKATE.

64. Magtiging vir lewering van bekwaamheidsertifikate.
65. Uitreiking van bekwaamheidsertifikaat as navigasie-offisier of gesagvoerder.

HOOFSTUK VIII.

DIENSSERTIFIKATE.

66. Hoe aansoek gedoen moet word.

HOOFSTUK IX.

LEERPLANNE.

67. Algemeen.

AANHANGSELS.

- Aanhangsel A.—Lys van vorms wat in hierdie regulasies voorkom.
- Aanhangsel B.—Gesigstoetse vir kleur en vorm.
- Aanhangsel C.—Internasionale Regulasies vir die Voorkoming van Botsings op See, 1948.
- Aanhangsel D.—Leerplanne vir eksamens.

HOOFSTUK I.

ALGEMEEN.

OPSKRIF VAN HIERDIE REGULASIES.

1. Hierdie regulasies word genoem die Regulasies in verband met eksamens vir Gesagvoerders en Navigasie-offisiere.

WOORDBETEKENIS.

2. In hierdie regulasies, tensy uit die samehang anders blyk, beteken—
(1) „eksaminator”, die persoon wat kragtens subartikel (4) van artikel *sewe-en-sewentig* van die Handelskeepvaartwet, 1951, as sulks aangestel word;

(2) "long voyage" means a voyage in which the distance between the extreme ports visited by the ship in the course of the voyage is not less than 500 miles;

(3) "short voyage" means a voyage in which the distance between the extreme ports visited by the ship in the course of the voyage is less than 500 miles,

and any reference to phrases or words which occur in the Merchant Shipping Act, 1951, shall be construed as having the same meaning as that assigned to them in that Act.

NOTE.—

(1) Section two of the Act contains the following definitions:—

"apprentice-officer" means an indentured apprentice to the sea service;

"cadet" means an unindentured apprentice to the sea service;

"coasting ship" means a ship of not more than one thousand gross register tons employed in plying between ports in the same country, but does not include any fishing, sealing or whaling boat;

"Director" means the Director of Merchant Shipping appointed under section five;

"fishing boat" means any ship of not more than one thousand gross register tons engaged in sea fishing for profit, but does not include any sealing boat or whaling boat.

"foreign-going ship" means—

(a) a ship plying between a port in one country and a port in another country; or

(b) a ship of more than one thousand gross register tons plying between ports in the same country; or

(c) a ship of more than one thousand gross register tons exclusively employed in sea fishing or seal catching; or

(d) a whaling boat other than a shore-based whaling boat;

"medical practitioner" means—

(a) at a place in the Union, a person registered as such under the Medical, Dental and Pharmacy Act, 1928 (Act No. 13 of 1928); or

(b) at a place outside the Union, a person who is entitled to practise as such under the law in force in that place;

"Minister" means the Minister of Finance;

* "proper officer" means the officer designated by the Minister to be the proper officer at the place and in respect of the matter to which reference is made in the provision of this Act in which the expression occurs;

"sealing boat" means any ship of not more than one thousand gross register tons exclusively employed in seal-catching;

"shore-based whaling boat" means a whaling boat which delivers the whole of its catch to be processed in a factory establishment ashore in the Union;

"whaling boat" means any ship engaged exclusively in whale-catching, or on which any processing takes place of the bodies or any portion of the bodies of the whales caught by other whaling boats.

* It is proposed to seek the Minister's authority to designate the following officers as "proper officers":—

At Cape Town, Durban: The Principal Officer of the Marine Survey Office.

At Port Elizabeth and East London: The Shipping Master.

At Mossel Bay, Port Nolloth, Luderitz and Walvis Bay: The Collector of Customs.

(2) „langseereis”, 'n seereis waarin die afstand tussen die uiterste hawens wat deur die skip in die loop van die seereis besoek word, minstens 500 myl is;

(3) „kortseereis”, 'n seereis waarin die afstand tussen die uiterste hawens wat deur die skip in die loop van die seereis besoek word, minder as 500 myl is;

en enige verwysing na uitdrukkings of woorde wat in die Handelskeepvaartwet, 1951, voorkom, moet uitgelê word volgens die betekenis by die Wet daaraan gegee.

[LET WEL.—

(1) In artikel twee van die Wet verskyn onderstaande woordbepalings—

„leerling-offisier”, 'n vakleerling in die seediens wat deur 'n leerkontrak verbind is;

„kadet”, 'n vakleerling in die seediens wat nie deur 'n leerkontrak verbind is nie;

„kusvaarder”, 'n skip van hoogstens eenduisend bruto-registerton wat gebruik word op reise tussen hawens in dieselfde land, maar dit omvat nie 'n vissersboot of 'n robbe- of walvisvaarder nie;

„Direkteur”, die Direkteur van Handelskeepvaart wat kragtens artikel vyf van die Wet aangestel is;

„vissersboot”, 'n skip van hoogstens eenduisend bruto-registerton wat vir gewin ter see visvang; maar dit omvat geen robbevaarder of walvisvaarder nie;

„skip op vreemde vaart”—

(a) 'n skip wat gebruik word op reise tussen 'n hawe in een land en 'n hawe in 'n ander land; of

(b) 'n skip van meer as eenduisend bruto-registerton wat gebruik word op reise tussen hawens in dieselfde land; of

(c) 'n skip van meer as eenduisend bruto-registerton wat uitsluitend vir visvang ter see of robbevangs gebruik word; of

(d) 'n walvisvaarder, uitgesonderd 'n walvisvaarder met landbasis;

„geneesheer”—

(a) by 'n plek in die Unie, iemand wat as sodanig ingevolge die Wet op Geneesheer, Tandartse en Aptekers, 1928 (Wet No. 13 van 1928), geregistreer is; of

(b) by 'n plek buite die Unie, iemand wat ingevolge die Wet wat op daardie plek van krag is, geregtig is om as sodanig te praktiseer;

„Minister”, die Minister van Finansies;

* „bevoegde beampte”, die beampte wat deur die Minister aangewys is as die bevoegde beampte by die plek en ten opsigte van die saak waarna verwys word in die bepaling in hierdie Wet waarin die uitdrukking voorkom;

„robbevaarder”, 'n skip van hoogstens een duisend bruto-registerton wat uitsluitend vir robbevangs gebruik word;

„walvisvaarder met landbasis”, 'n walvisvaarder wat sy gehele vangs vir verwerking in 'n fabriek wat aan wal in die Unie opgerig is, aflewer;

„walvisvaarder”, 'n skip wat uitsluitend vir walvisvangs gebruik word, of waarop enige verwerking van die liggame of enige deel van die liggame van die walvisse wat deur ander walvisvaarders gevang word, plaasvind.

* Die voorneme bestaan om die Minister se magtiging te verkry om die volgende beamptes as „bevoegde beamptes” aan te wys:—

Te Kaapstad en Durban: Die Hoofbeampte van die Marine-opnemingskantoor.

Te Port Elizabeth en Oos-Londen: Die Koopvaardymeester.

Te Mosselbaai, Port Nolloth, Luderitz en Walvisbaai: Die Ontvanger van Doeane.

(2) Attention is invited to the following provisions of the Merchant Shipping Act, 1951:—

- (a) Section *seventy-three*, which lays down that certain certificated officers are to be employed on certain ships;
- (b) section *seventy-four*, which states when the ships' officers are deemed to be duly certificated;
- (c) sections *seventy-seven* and *seventy-eight*, which make provision for the holding of examinations for the granting of certificates of competency; and
- (d) section *three hundred and fifty-four*, which makes provision for the recognition of certificates of competency or qualification granted in other Commonwealth countries:

Section *seventy-three* of the Act reads as follows:—

“(1) Subject to the provisions of this section, the owner and the master of every—

- (a) South African ship going to sea from any port whatsoever; or
- (b) ship (other than a South African ship) embarking passengers at, and going to sea from, any port in the Union,

shall, if the ship is of twenty-five or more gross register tons, and is of the class shown in Column 2 of any item in the table hereunder and of the tonnage or horse-power shown in column 3 of that item, ensure that there are employed on board that ship in their appropriate capacities the number of officers or other persons, duly certificated or deemed to be certificated under this Act, as shown in columns 4 and 5 of that item:—

(2) Die aandag word gevestig op onderstaande bepalinge van die Handelskeepvaartwet, 1951:—

- (a) Artikel *drie-en-sewentig* bepaal dat sekere gediplomeerde offisiere aan boord van sekere skepe werk-saam moet wees;
- (b) artikel *vier-en-sewentig* bepaal wanneer skeeps-offisiere as behoorlik gediplomeerd beskou word;
- (c) artikel *sewe-en-sewentig* en *agt-en-sewentig* maak voorsiening vir die hou van eksamens vir die toekenning van bekwaamheidsertifikate; en
- (d) artikel *driehonderd vier-en-vyftig* maak voorsiening vir die erkenning van bekwaamheid- of bevoegdheidsertifikate wat in ander Statebondslande toe-geken word.]

Artikel *drie-en-sewentig* van die Wet lees soos volg:—

„(1) Behoudens die bepalinge van hierdie artikel, moet die eienaar en die gesagvoerder van elke—

- (a) Suid-Afrikaanse skip wat van enige hawe, waar ook al, uitvaar; of
- (b) skip (wat nie 'n Suid-Afrikaanse skip is nie) wat passasiers by 'n Unie-hawe aan boord neem en van 'n Unie-hawe uitvaar,

indien die skip van vyf-en-twintig of meer bruto-registerton is, en tot die kategorie behoort wat in kolom 2 van 'n item in die tabel hieronder aangedui word, en van die tonnemaat of perdekrag is wat in kolom 3 van daardie item aangedui word, sorg dat aan boord van daardie skip in hul toepaslike werkskringe die aantal offisiere of ander persone, behoorlik kragtens hierdie Wet gediplomeerd of geag gediplomeerd te wees soos in kolom 4 en 5 van daardie item aangedui word, werksaam is:—

Column 1.	Column 2.	Column 3.	Column 4.	Column 5.
Item No.	Class of Ship.	Gross Register-tonnage or Normal Horse-power.	Numbers of Officers or Other Persons to be employed.	Certificates to be held by persons shown in Column 4, and paragraphs of sub-section (1) of section <i>seventy-five</i> by which grant of certificates is authorized.
1	Foreign-going ship.....	More than 1,000 tons.....	1 1 2	Master: Paragraph (a). Chief Navigating Officer: Paragraph (b). Second Navigating Officer: Paragraph (c).
2	Foreign-going ship.....	Not more than 1,000 tons..	1 1 1	Master: Paragraph (a). Chief Navigating Officer: Paragraph (b). Second Navigating Officer: Paragraph (c).
3	Coasting ship.....	100 or more tons.....	1 2	Master: Paragraph (d). Navigating Officer: Paragraph (e).
4	Fishing, sealing or shore-based whaling boat	100 or more tons.....	1 1 1	Skipper: Paragraph (f). Mate: Paragraph (g). Boatswain: Paragraph (h).
5	Coasting ship or fishing, sealing or shore-based whaling boat	Less than 100 tons.....	1 1	Skipper: Paragraph (i). Mate: Paragraph (j).
6	Foreign-going ship, other than a whaling boat	100 or more horse-power..	1 1	Chief Engineer Officer: Paragraph (k). Second Engineer Officer: Paragraph (l).
7	Coasting ship.....	150 or more horse-power..	1	Chief Engineer Officer: Paragraph (k).
8	Whaling boat, other than a shore-based whaling boat	100 or more horse-power..	1	Chief Engineer Officer: Paragraph (k).
9	Coasting ship.....	Less than 150 horse-power.	1	Second Engineer Officer: Paragraph (l).
10	Foreign-going ship, other than a whaling boat	Less than 100 horse-power.	1	Second Engineer Officer: Paragraph (l).
11	Whaling boat, other than a shore-based whaling boat	Less than 100 horse-power.	1	Second Engineer Officer: Paragraph (l).
12	Power-driven fishing, sealing or shore-based whaling boat	100 or more tons.....	1 1	Marine Engineman: Paragraph (m). Assistant Marine Engineman: Paragraph (n).
13	Power-driven fishing, sealing or shore-based whaling boat	Less than 100 tons.....	1	Assistant Marine Engineman: Paragraph (n).

Kolom 1.	Kolom 2.	Kolom 3.	Kolom 4.	Kolom 5.
Item No.	Kategorie van skip.	Bruto-register tonnemaat of nominale perdekras.	Aantalle offisiere of ander persone wat in diens moet wees.	Sertifikate waarvan die persone wat in Kolom 4 aangedui word, in besit moet wees, en paragrawe van sub-artikel (1) van artikel vyf-en-sewentig waarby toekenning van sertifikate goedgekeur word.
1	Skip op vreemde vaart.....	Meer as 1,000 ton.....	1 1 2	Gesagvoerder. Paragraaf (a). Hoof-navigasie-offisier. Paragraaf (b). Tweede navigasie-offisier. Paragraaf (c).
2	Skip op vreemde vaart.....	Nie meer as 1,000 ton nie..	1 1 1	Gesagvoerder. Paragraaf (a). Hoof-navigasie-offisier. Paragraaf (b). Tweede navigasie-offisier. Paragraaf (c).
3	Kusvaarder.....	100 of meer ton.....	1 2	Gesagvoerder. Paragraaf (d). Navigasie-offisier. Paragraaf (e).
4	Vissersboot, robbevaarder of walvisvaarder met landbasis	100 of meer ton.....	1 1 1	Skipper. Paragraaf (f). Stuurman. Paragraaf (g). Bootsman. Paragraaf (h).
5	Kusvaarder, vissersboot of robbevaarder of walvisvaarder met landbasis	Minder as 100 ton.....	1 1	Skipper. Paragraaf (i). Stuurman. Paragraaf (j).
6	Skip op vreemde vaart (behalwe 'n walvisvaarder)	100 of meer perdekras.....	1 1	Hoof-ingenieursoffisier. Paragraaf (k). Tweede ingenieursoffisier. Paragraaf (l).
7	Kusvaarder.....	150 of meer perdekras.....	1	Hoof-ingenieursoffisier. Paragraaf (k).
8	Walvisvaarder (behalwe 'n walvisvaarder met landbasis)	100 of meer perdekras.....	1	Hoof-ingenieursoffisier. Paragraaf (k).
9	Kusvaarder.....	Minder as 150 perdekras...	1	Tweede ingenieursoffisier. Paragraaf (l).
10	Skip op vreemde vaart (behalwe 'n walvisvaarder)	Minder as 100 perdekras...	1	Tweede ingenieursoffisier. Paragraaf (l).
11	Walvisvaarder (behalwe 'n walvisvaarder met landbasis)	Minder as 100 perdekras...	1	Tweede ingenieursoffisier. Paragraaf (l).
12	Vissersboot of robbevaarder of walvisvaarder met landbasis wat meganies voortbeweeg word	100 of meer ton.....	1 1	See-masjinis. Paragraaf (m). Assistent-see-masjinis. Paragraaf (n).
13	Vissersboot of robbevaarder of walvisvaarder met landbasis wat meganies voortbeweeg word	Minder as 100 ton.....	1	Assistent-see-masjinis. Paragraaf (n).

(2) The Minister may by notice in the *Gazette* require that more or more highly certificated officers or other persons than are prescribed by sub-section (1) shall be employed on board any class of ships of any tonnage or horse-power specified in that notice; and after the publication of any such notice the owner of any ship to which it applies shall ensure that there are employed on board that ship the number of officers or other persons prescribed by that notice, duly certificated or deemed to be certificated under this Act.

(3) Whenever the Minister is satisfied from a report by a surveyor that it would be unreasonable to require the owner of a ship built before the coming into operation of this section to provide the accommodation on board that ship necessary to accommodate the numbers of officers or other persons required to be employed in terms of sub-section (1) or in terms of a notice issued under sub-section (2), he may vary the requirements of sub-section (1) or of that notice in respect of that ship as he deems fit.

(4) The owner of every Commonwealth ship (other than a ship embarking passengers at a port in the Union) going to sea from any port in the Union shall ensure that there are employed on board that ship in their appropriate capacities a master and so many ships' officers holding certificates of such grades as, by the relative laws in force in that part of the Commonwealth in which the ship is registered, she is required to carry when going to sea from a port in that part of the Commonwealth.

(2) Die Minister kan by kennisgewing in die *Staatskoerant* vereis dat meer of hoër gediplomeerde offisiere of ander persone as wat by subartikel (1) voorgeskryf word, aan boord van 'n kategorie van skepe van 'n tonnemaat of perdekras wat in daardie kennisgewing gemeld word, in diens moet wees; en na publikasie van so 'n kennisgewing sorg die eienaar van 'n skip waarvoor dit geld, dat aan boord van daardie skip die aantal offisiere of ander persone wat by daardie kennisgewing voorgeskryf word, behoorlik kragtens hierdie Wet gediplomeerd of geag gediplomeerd te wees, in diens is.

(3) Wanneer die Minister uit 'n verslag deur 'n opnemer daarvan oortuig is dat dit onredelik sou wees om van die eienaar van 'n skip wat voor die inwerkingtreding van hierdie artikel gebou was, te verlang dat hy aan boord van daardie skip die akkommodasie sou moet verskaf wat nodig sou wees om die aantal offisiere of ander persone wat ingevolge subartikel (1) of ingevolge 'n kragtens subartikel (2) uitgereikte kennisgewing in diens moet wees, te akkomodeer, kan hy ten opsigte van daardie skip die vereistes van subartikel (1) of van daardie kennisgewing na goeddunke wysig.

(4) Die eienaar van elke Statebond-skip (behalwe 'n skip wat passasiers by 'n Unie-hawe aan boord neem) wat uit 'n Unie-hawe uitvaar, sorg dat aan boord van die skip in hul toepaslike werkkringe werksaam is 'n gesagvoerder en soveel skeeps-offisiere wat die houer is van sertifikate van sulke grade as wat, volgens die betrokke wette wat in daardie deel van die Statebond waarin die skip geregistreer is, van krag is, die skip verplig is om aan boord te hê wanneer dit uit 'n hawe in daardie deel van die Statebond uitvaar.

(5) No person who has been engaged for the purpose of sub-section (1) or (2) as master or ship's officer shall go to sea as such unless he is duly certificated, or deemed to be so certificated, in terms of this Act.

(6) No person shall for the purpose of sub-section (1) or (2) employ a master or ship's officer as such without first ascertaining that he is duly certificated, or deemed to be so certificated, in terms of this Act.

(7) In this section "nominal horse-power" in relation to any ship means the horse-power of the engines of the ship, calculated according to the regulations, which may provide for different methods of calculation in respect of different types of engines.

(8) This section shall not apply in respect of any vessel belonging to the Railway Administration and used by that Administration in connection with the working of its harbours, if that vessel goes to sea in an emergency."

(3) Attention is invited to the fact that it is proposed to seek authority to amend section *seventy-three* of the Act as follows:—

(1) By the substitution for the table set forth in sub-section (1) of the following new table:—

(5) Niemand wat ter voldoening aan subartikel (1) of (2) as gesagvoerder of skeepsoffisier in diens geneem is, vaar uit ter see nie tensy hy kragtens hierdie Wet behoorlik gediplomeerd is of geag word aldus gediplomeerd te wees.

(6) By toepassing van subartikel (1) of (2) neem niemand 'n gesagvoerder of skeepsoffisier as sodanig in diens nie sonder vooraf vas te stel dat hy kragtens hierdie Wet behoorlik gediplomeerd is of geag word aldus gediplomeerd te wees.

(7) In hierdie artikel beteken „nominale perdekrag" ten opsigte van 'n skip, die perdekrag van die masjiene van die skip bereken volgens die regulasies, wat ten aansien van verskillende soorte masjiene verskillende metodes van berekening kan voorskryf.

(8) Hierdie artikel is nie ten aansien van enige vaartuig wat aan die Spoorwegadministrasie behoort en wat deur daardie Administrasie in verband met sy hawebedryf gebruik word, as daardie vaartuig in geval van nood ter see uitvaar, van toepassing nie."

(3) Die aandag word gevestig op die feit dat die voorname bestaan om magtiging te verkry om artikel *drie-en-sewentig* van die Wet as volg te wysig:—

(1) Deur die tabel wat in subartikel (1) voorkom, deur die volgende tabel te vervang:—

Column 1.	Column 2.	Column 3.	Column 4.	Column 5.
Item No.	Class of Ship.	Gross Register-tonnage or Normal Horse-power.	Numbers of Officers or Other Persons to be employed.	Certificates to be held by persons shown in Column 4, and paragraphs of sub-section (1) of section <i>seventy-five</i> by which grant of certificates is authorized.
1	Foreign-going ship.....	Any.....	1 1 1	Master: Paragraph (a). Chief Navigating Officer: Paragraph (b). Second Navigating Officer: Paragraph (c).
2	Coasting ship.....	100 or more tons.....	1 1	Master: Paragraph (d). Navigating Officer: Paragraph (e).
3	Fishing, sealing or shore-based whaling boat	100 or more tons.....	1 1 1	Skipper: Paragraph (f). Mate: Paragraph (g). Boatswain: Paragraph (h).
4	Coasting ship or fishing, sealing or shore-based whaling boat	50 or more but less than 100 tons	1 1	Skipper: Paragraph (i). Mate: Paragraph (j).
5	Coasting ship or sealing or shore-based whaling boat	Less than 50 tons.....	1 1	Skipper: Paragraph (i). Mate: Paragraph (j).
6	Fishing Boat.....	Less than 50 tons.....	1	Mate: Paragraph (j).
7	Foreign-going ship, other than a whaling boat	560 or more horsepower....	1 1	Chief Engineer-officer: Paragraph (k). Second Engineer-officer: Paragraph (l).
8	Coasting ship.....	850 or more horsepower....	1	Chief Engineer-officer: Paragraph (k).
9	Whaling boat, other than a shore-based whaling boat	560 or more horsepower....	1	Chief Engineer-officer: Paragraph (k).
10	Coasting ship.....	Less than 850 horsepower..	1	Second Engineer-officer: Paragraph (l).
11	Foreign-going ship, other than a whaling boat	Less than 560 horse-power.	1	Second Engineer-officer: Paragraph (l).
12	Whaling boat other than a shore-based whaling boat	Less than 560 horse-power.	1	Second Engineer-officer: Paragraph (l).
13	Power-driven fishing, sealing or shore-based whaling boat	More than 300 horse-power	1 1	Marine Engineman: Paragraph (m). Assistant Marine Engineman: Paragraph (n).
14	Power-driven fishing, sealing or shore-based whaling boat	300 or less horse-power....	1	Assistant Marine Engineman: Paragraph (n).

Kolom 1.	Kolom 2.	Kolom 3.	Kolom 4.	Kolom 5.
Item No.	Kategorie van skip.	Bruto register-tonnemaat of perdekrag.	Aantalle offisiere of ander persone wat in diens moet wees.	Sertifikate waarvan die persone wat in Kolom 4 aangedui word, in besit moet wees, en paragrawe van sub-artikel (1) van artikel vyf-en-sewentig waarby toekenning van sertifikate goedgekeur word.
1	Skip op vreemde vaart.....	Enige.....	1 1 1	Gesagvoerder. Paragraaf (a). Hoof navigasie-offisier. Paragraaf (b). Tweede navigasie-offisier. Paragraaf (c).
2	Kusvaarder.....	100 of meer ton.....	1 1	Gesagvoerder. Paragraaf (d). Navigasie-offisier. Paragraaf (e).
3	Visserboot of robbevaarder of walvisvaarder met landbasis	100 of meer ton.....	1 1 1	Skipper. Paragraaf (f). Stuurman. Paragraaf (g). Bootsman. Paragraaf (h).
4	Kusvaarder of visserboot, robbevaarder of walvisvaarder met landbasis	50 of meer maar minder as 100 ton	1 1	Skipper. Paragraaf (i). Stuurman. Paragraaf (j).
5	Kusvaarder of robbevaarder of walvisvaarder met landbasis	Minder as 50 ton.....	1	Skipper. Paragraaf (i). Stuurman. Paragraaf (j).
6	Visserboot.....	Minder as 50 ton.....	1	Stuurman. Paragraaf (j).
7	Skip op vreemde vaart (behalwe 'n walvisvaarder)	560 of meer.....	1 1	Hoof-ingenieursoffisier. Paragraaf (k). Tweede ingenieursoffisier. Paragraaf (l).
8	Kusvaarder.....	850 of meer perdekrag....	1	Hoof-ingenieursoffisier. Paragraaf (k).
9	Walvisvaarder behalwe 'n walvisvaarder met landbasis)	560 of meer perdekrag....	1	Hoof-ingenieursoffisier. Paragraaf (k).
10	Kusvaarder.....	Minder as 850 perdekrag...	1	Tweede ingenieursoffisier. Paragraaf (l).
11	Skip op vreemde vaart (behalwe 'n walvisvaarder)	Minder as 560 perdekrag...	1	Tweede ingenieursoffisier. Paragraaf (l).
12	Walvisvaarder (behalwe 'n walviswalvisvaarder met landbasis)	Minder as 560 perdekrag...	1	Tweede ingenieursoffisier. Paragraaf (l).
13	Visserboot of robbevaarder of walvisvaarder met landbasis wat meganies voortbeweeg word	Meer as 300 perdekrag....	1 1	Seemasjinis. Paragraaf (m). Assistent-seemasjinis. Paragraaf (n).
14	Visserboot of robbevaarder of walvisvaarder met landbasis wat meganies voortbeweeg word.	300 of minder perdekrag...	1	Assistent-seemasjinis. Paragraaf (n).

(2) Delete sub-section (7).

DIRECTOR TO DETERMINE ELIGIBILITY.

3. If any doubt arises as to the eligibility of any candidate to be admitted to any examination, the matter shall, notwithstanding the provisions of these regulations, be referred to the Director, whose decision shall be final.

PROOF OF NATIONALITY.

4. No candidate shall be examined for a certificate of competency unless he produces proof to the satisfaction of the examiner that he is a South African citizen or a citizen of a country (other than the Union) which is a member of the Commonwealth.

(NOTE.—Proof of citizenship will, in ordinary circumstances, involve the production of a birth certificate, a certificate of registration or of naturalization, or some other acceptable documentary evidence of nationality.)

PLACES OF EXAMINATION.

5. Examinations, including colour and form vision tests, shall be held at places and on days to be determined by the Minister.

(NOTE.—It is proposed to seek the Minister's authority to hold examinations at Cape Town and Durban. Special arrangements may be made from time to time for examinations to be held at places other than Cape Town and Durban.)

FORM OF APPLICATION.

6. A candidate for examination for a certificate of competency shall complete the form M.1 set forth in Annexure A.

(2) Deur subartikel (7) te skrap.

DIREKTEUR MOET BENOEMBAARHEID VAN KANDIDATE VASSTEL.

3. As daar enige twyfel ontstaan omtrent die benoembaarheid van 'n kandidaat tot 'n eksamen, word die saak, ongeag die bepalings van hierdie regulasies, na die Direkteur verwys, wie se beslissing dienaangaande finaal is.

BEWYS VAN NASIONALITEIT.

4. Geen kandidaat vir 'n bekwaamheidsertifikaat word geëksamineer nie tensy hy bewys lewer dat hy 'n Suid-Afrikaanse burger of 'n burger is van 'n land (behalwe die Unie) wat lid is van die Statebond.

(LET WEL.—Onder gewone omstandighede gaan bewys van nasionaliteit gepaard met die voorlegging van 'n geboortesertifikaat, 'n registrasie- of naturalisasiesertifikaat, of een of ander aanneemlike dokumentêre bewys van nasionaliteit.)

PLEKKE WAAR EKSAMENS GEHOU WORD.

5. Eksamens, insluitende gesigstoetse vir kleur en vorm word op plekke en tye gehou soos deur die Minister bepaal word.

(LET WEL.—Die voorneme bestaan om magtiging van die Minister te verkry om eksamens by Kaapstad en Durban te hou. Spesiale reëlings sal van tyd tot tyd getref word om eksamens op ander plekke as Kaapstad en Durban te hou.

AANSOEKVORM.

6. 'n Eksamenkandidaat vir 'n bekwaamheidsertifikaat moet die vorm M1 soos in Aanhangel A uiteengesit, voltooi.

OTHER DOCUMENTS TO BE SUBMITTED.

7. (1) Form M.1 properly completed and accompanied by the candidate's—

- (a) birth certificate;
- (b) record book or other documentary proof of sea service;
- (c) first aid certificate;
- (d) testimonials (see regulation 10); and
- (e) watchkeeping certificates,

shall be handed in at the office of, or posted so as to reach, the examiner at the port at which the candidate wishes to be examined at least fourteen days before the date on which he wishes to be examined, or handed in at the office, or posted so as to reach, the proper officer at any other port at least twenty-one days before the date of the examination; provided that the examiner may allow the candidate to sit even if the said documents were handed in or posted later than is required by this regulation.

(2) If a candidate is in possession of a valid certificate of competency or service he shall, before being admitted to the examination which he wishes to sit, hand in such certificate to the examiner.

[NOTE.—If the candidate is not able to produce the certificate mentioned under (1) (a), other satisfactory proof of age may be accepted.]

CONSIDERATION OF DOUBTFUL CASES.

8. A candidate who has any doubt whether he is eligible to be examined for a certificate of competency may forward the documents enumerated in regulations 6 and 7, duly completed, to the examiner or proper officer, who may refer them to the Director for consideration.

ENQUIRIES.

9. All other enquiries regarding examinations shall be made and dealt with in the same way as detailed in regulation 8. Candidates shall clearly state the point on which information is sought and all relevant certificates and testimonials shall accompany the enquiry. Enquiries from abroad may be addressed to the Director of Merchant Shipping, Pretoria.

TESTIMONIALS.

10. (1) Candidates for certificates of competency shall produce testimonials satisfactory to the examiner as to character, including sobriety, experience, ability and general good conduct on board ship, and such testimonials shall, subject to the provisions of regulation 16, cover the last twelve months of sea service immediately preceding the date of application.

(2) Testimonials shall be signed by the master of the ship under whom the service was performed, and, if the master is not available, by the owner of the ship or his representative.

(NOTE.—If a candidate is somewhat hard of hearing or suffers from any other physical defect of such a nature that it might interfere with the proper performance of his duties as a navigating officer on watch, it should be stated in his testimonials whether the defect did in fact interfere in any way with the proper performance of the candidate's duties.)

DEAFNESS AND OTHER PHYSICAL AND MENTAL DISABILITIES.

11. (1) If during the progress of an examination the examiner finds that a candidate is deaf, or has an impediment in his speech, or suffers from some other physical or mental infirmity, and is satisfied that the degree of deafness or the impediment or other infirmity is such as to render the candidate incompetent to discharge the ordinary duties of the station on a ship which the certi-

ANDER DOKUMENTE WAT VOORGELÊ MOET WORD.

7. (1) Vorm M.1, behoorlik voltooi, tesame met die kandidaat se—

- (a) geboortesertifikaat;
- (b) aantekeningboek of ander dokumentêre bewys van seediens;
- (c) eerstehulpserifikaat;
- (d) getuigskrifte (sien regulasie 10); en
- (e) waghoudiensiensertifikaat;

moet by die kantoor van die eksaminator ingedien word, of gepos word, sodat dit hom by die hawe waar die kandidaat geëksamineer wil word, minstens veertien dae voor die datum waarop hy geëksamineer wil word, bereik, of by die kantoor van die bevoegde beamppte by enige ander hawe ingedien word of gepos word, sodat dit hom minstens veertien dae voor die hou van die eksamen bereik; met dien verstande dat die eksaminator die kandidaat kan toelaat om die eksamen af te lê selfs indien die genoemde dokumente later ingedien of gepos word as wat by daardie regulasie voorgeskryf of verlang word.

(2) As 'n kandidaat in besit is van 'n geldige bekwaamheid- of dienssertifikaat, moet hy, alvorens hy tot die aflê van die eksamen toegelaat word, sodanige sertifikaat by die eksaminator indien.

[LET WEL.—As die kandidaat nie die sertifikaat in (1) (a) hierbo genoem kan voorlê nie, kan ander bevredigende bewys van ouderdom aanvaar word.]

OORWEGING VAN TWYFELAGTIGE GEVALLE.

8. 'n Kandidaat by wie daar twyfel bestaan of hy tot die aflê van 'n eksamen vir 'n bekwaamheidsertifikaat in aanmerking kan kom, kan die dokumente soos in regulasies 6 en 7 uiteengesit en behoorlik voltooi, aan die eksaminator of bevoegde beamppte stuur, wat dit dan aan die Direkteur vir oorweging kan deurstuur.

INLIGTING.

9. Alle ander inligting aangaande eksamens moet op dieselfde wyse soos in regulasie 8 uiteengesit, gedoen word; en word op dieselfde wyse behandel. Kandidate moet die punt waaroor inligting verlang word, duidelik uiteensit en alle relevante sertifikate en getuigskrifte moet die aansoek om inligting vergesel. Buitelandse aansoeke om inligting kan aan die Direkteur van Handelskeepvaart, Pretoria, geadresseer word.

10. GETUIGSKRIFTE.

10. (1) Kandidate vir bekwaamheidsertifikate moet tot bevrediging van die eksaminator getuigskrifte voorlê aangaande inbors, asook soberheid, ondervinding, bekwaamheid en algemene goeie gedrag aan boord skip, en behoudens die bepalinge van regulasie 16, moet sodanige sertifikate die laaste twaalf maande van seediens, onmiddellik voor die datum van aansoek, dek.

(2) Getuigskrifte moet onderteken word deur die gesagvoerder van die vaartuig onder wie die diens verrig is, en, indien die gesagvoerder nie beskikbaar is nie, deur die eienaar van die vaartuig of sy verteenwoordiger.

(LET WEL.—As die kandidaat ietwat hardhorig is of aan 'n ander liggaamsgebrek ly wat van so 'n aard is dat dit hom by die behoorlike uitvoering van sy pligte as navigasie-offisier op waghoudiens kan belemmer, moet daar in sy getuigskrifte vermeld word of die gebrek hom werklik enigins by die behoorlike uitvoering van sy pligte belemmer het.)

DOOFHEID EN ANDER LIGGAAMS- OF GEESTESGEBREKE.

11. (1) As die eksaminator gedurende die loop van 'n eksamen vind dat 'n kandidaat doof is, of 'n spraakgebrek het, of aan een of ander liggaams- of geestesgebrek ly, en oortuig is dat die mate van doofheid of gebrek of swakte sodanig is dat dit die kandidaat onbekwaam sou maak om die gewone pligte van die rang waartoe die sertifikaat

ficate for which the candidate is being examined would entitle him to hold, he shall not allow the candidate to complete the examination.

(2) The examiner shall report to the Director all cases in which action of this nature is taken.

(3) A candidate against whom action has been taken in terms of paragraph (1) may appeal to the Director for a review of the circumstances of his case.

(4) The Director may, in deciding whether such a candidate may be allowed to sit again for an examination, take into consideration any medical certificate subsequently produced stating that the candidate's hearing, speech or physical or mental condition has improved or is normal.

(NOTE.—Attention is invited to the provisions of section eighty-seven of the Act which empowers the proper officer to require the holder of a certificate of competency or service to submit himself to a medical examination, if at any time it appears that owing to ill health or mental or physical defect he is unfit to perform the duties required of him. If after consideration of the medical report the Minister is satisfied that the person concerned is incapable of performing satisfactorily the duties appertaining to his certificate of competency or service he may direct that the holder shall not be engaged or go to sea in the capacity referred to in the certificate or in any other capacity specified by the Minister.)

SERVICE FOUND TO BE INSUFFICIENT.

12. (1) If after a candidate has passed the examination it is discovered that his service is insufficient to entitle him to receive a certificate of the grade for which he has passed, the certificate shall not, subject to the provisions of this regulation, be granted to him.

(2) If the Director is not satisfied that the error in the calculation of the candidate's service occurred through the fault of or through wilful misrepresentation by the candidate, the certificate shall be withheld pending the production of satisfactory proof that the necessary service has been completed in full, upon which the certificate shall, subject to the provisions of these regulations, be issued to him.

(3) If the Director is satisfied that the error was deliberately made, the certificate shall be withheld until the candidate has completed the necessary qualifying service in full and has performed such further period of service as may be decided by the Director, has again paid the appropriate fee and has again passed the examination.

(4) Any additional service performed by a candidate in terms of paragraph (3) shall not count as qualifying service for any other certificate.

[NOTE.—Attention is invited to sub-section (2) of section seventy-eight of the Act, which provides that the Minister may, at any time before the delivery of a certificate, require a re-examination of the applicant by the examiners who made the examination or by other examiners, and order a further enquiry into his testimonials or character or both, and if not satisfied with the result may order that the certificate be not granted to him.]

COPIES OF LOST CERTIFICATE.

13. An applicant for a certified copy of a lost certificate, whether of competency of service, shall complete the form of application M.3 set forth in Annexure A, giving the necessary particulars, and shall hand it to the proper officer, paying at the same time the fee of 5s. A declaration as to the circumstances in which the certificate was lost shall be made by the applicant before the proper officer, who shall transmit the form of application to the Director.

waarvoor hy geëksamineer word hom die reg sou verleen om te hou, in 'n skip te verrig, moet hy nie toelaat dat die kandidaat die eksamen voltooi nie.

(2) Die eksaminator moet aan die Direkteur van alle gevalle waar sodanig opgetree is, verslag doen.

(3) 'n Kandidaat teen wie ingevolge paragraaf (1) opgetree is, kan na die Direkteur appelleer om die omstandighede van sy geval in hersiening te neem.

(4) Die Direkteur kan by beoordeling of so 'n kandidaat weer tot die afle van 'n eksamen toegelaat mag word, enige doktersertifikaat wat daarna voorgelê word en waarin verklaar word dat die gehoor, spraak of liggaams- of geestestoestand van die kandidaat verbeter het of normaal is, in oorweging neem.

(LET WEL.—Die aandag word gevestig op die bepalinge van artikel sewe-en-tagtig van die Wet wat die bevoegde beampte magtig om, as dit te eniger tyd vir hom voorkom dat die houer van 'n bekwaamheid- of dienssertifikaat weens slegte gesondheid of geestes- of liggaamsgebrek ongeskik is om die pligte wat van hom geverg word, te verrig, te beveel dat hy hom aan ondersoek deur 'n geneesheer moet onderwerp. As die Minister na oorweging van die verslag oor die mediese ondersoek oortuig is dat die betrokke persoon onbekwaam is om die pligte waarop sy bekwaamheid- of dienssertifikaat betrekking het op bevredigende wyse te verrig, kan hy opdrag gee dat die houer nie in die hoedanigheid waarna in die sertifikaat verwys word of in enige ander deur die Minister bepaalde hoedanigheid, in diens geneem word of ter see uitvaar nie.)

ONVOLDOENDE DIENSTYD.

12. (1) As daar bevind word dat 'n kandidaat nadat hy in die eksamen geslaag het, onvoldoende diens het vir die toekenning aan hom van 'n sertifikaat van die graad waarin hy geslaag het, word die sertifikaat waarop hy geregtig is, behoudens die bepalinge van hierdie regulasie, nie aan hom toegeken nie.

(2) As die Direkteur nie oortuig is dat die fout in die berekening van die kandidaat se dienstyd weens die skuld of opsetlike wanvoorstelling van die kandidaat ontstaan het nie, word die sertifikaat agterweê gehou hangende die voorlegging van bevredigende bewys dat die vereiste diens volledig voltooi is, waarop die sertifikaat, behoudens die bepalinge van hierdie regulasies aan hom uitgereik word.

(3) As die Direkteur oortuig is dat die fout opsetlik gedoen is, word die sertifikaat agterweê gehou totdat die kandidaat die vereiste kwalifiserende diens volledig voltooi het en sodanige verdere dienstyd voltooi het as wat die Direkteur mag bepaal, en die toepaslike gelde weer betaal het en opnuut in die eksamen geslaag het.

(4) Addisionele diens wat deur 'n kandidaat ingevolge paragraaf (3) verrig word, kom nie as kwalifiserende diens vir enige ander sertifikaat in aanmerking nie.

[LET WEL.—Die aandag word gevestig op subartikel (2) van artikel agt-en-sewentig van die Wet, wat bepaal dat die Minister te eniger tyd voor die aflewering van 'n sertifikaat kan gelas dat die applikant opnuut geëksamineer word deur die eksaminatore wat die eksamen afgeneem het of deur enige ander eksaminatore, en dat nadere ondersoek na sy getuigskrifte of inbors of albei ingestel word, en as hy nie met die uitslag tevrede is nie, kan gelas dat geen sertifikaat aan hom uitgereik word nie.]

AFSKRIFTE VAN VERLORE SERTIFIKATE.

13. 'n Applikant vir 'n verlore sertifikaat, ditsy van bekwaamheid of diens, moet die aansoekvorm M.3, soos in Aanhangsel A uiteengesit, voltooi, met vermelding van alle besonderhede, en dit aan die bevoegde beampte oorhandig en terselfdertyd 5s. betaal. 'n Verklaring aangaande die omstandighede waaronder die sertifikaat verlore geraak het, moet voor die bevoegde beampte gedoen word, wat die aansoekvorm aan die Direkteur moet deurstuur.

No fee is chargeable if the applicant shows that the certificate was lost through shipwreck or fire on board ship.

FIRST AID CERTIFICATES.

14. (1) No candidates shall be examined for a certificate of competency as Master or Navigating Officer until he produces a certificate issued by a medical practitioner, body or association approved by the Director, to the effect that he has passed an examination in First Aid to the injured.

(2) The certificate shall have been obtained by the candidate when sixteen years of age or more, and the examination for it shall have been passed not more than three years before the date of the examination for the certificate of competency.

(NOTE.—The following bodies and associations have been approved by the Director:—

The St. John Ambulance Association.
The South African Red Cross Society.
Die Suid-Afrikaanse Noodhulp Liga.

If a candidate does not possess such a certificate of proficiency in First Aid he should apply some time before he wishes to sit for examination for a certificate of competency to the local secretary of the approved body or association or an approved medical practitioner who will inform him of the available facilities for the instruction and examination of candidates in First Aid. A list of addresses of the local secretaries of the approved bodies or associations may be obtained from the proper officer.)

COLOUR AND FORM VISION TESTS.

15. (1) A candidate for a Certificate of Competency as Master or Navigating Officer shall pass the prescribed colour and form vision tests set out in Annexure B to these regulations before a certificate is issued to him; provided that if for any reason it is necessary for the candidate to proceed with the written and oral portions of the examination before undergoing the tests, such examination shall be cancelled if he fails to pass either part of the said tests; provided, further, that a candidate who holds a Certificate of Competency as Master, Navigating Officer, Skipper, Mate or Boatswain shall not again be required to be examined in the Lantern Test.

(2) A certificate of a pass in the prescribed colour and form vision tests shall be valid for three months only.

(3) Any person who wishes to undergo the tests shall make application on the form M.4 set forth in Annexure A to the proper officer and shall pay a fee of two shillings and sixpence. This fee is payable on each occasion on which a candidate is examined.

(NOTE.—The colour and form vision tests are open to all persons serving or intending to serve in the merchant navy and all such persons are advised to take the earliest opportunity of establishing the fact that their vision is such as to enable them to pass the colour and form vision tests prescribed for candidates for certificates as Master and Navigating Officer.)

MISCONDUCT BY CANDIDATES.

16. (1) In the case of a candidate who—

- (a) after having signed the agreement with the crew has neglected to join his ship; or
- (b) after having joined has deserted his ship; or
- (c) has been convicted by a legal tribunal of an offence for which he has been sentenced to imprisonment without the option of a fine or which the examiner considers to be of a serious nature; or

As die applikant kan aantoon dat die sertifikaat weens skipbreuk of brand aanboord verlore geraak het, is geen gelde betaalbaar nie.

EERSTEHULPSERTIFIKATE.

14. (1) Geen kandidaat mag vir 'n bekwaamheidsertifikaat as gesagvoerder of navigasie-offisier geëksamineer word nie alvorens hy 'n sertifikaat, uitgereik deur 'n geneesheer, liggaam of verenigings deur die Direkteur goedgekeur, voorlê met die strekking dat hy 'n eksamen in eerstehulp aan beseerdes geslaag het.

(2) Die kandidaat moet die sertifikaat verkry het toe hy sestien jaar of ouer was en in die eksamen daarvoor geslaag het hoogstens drie jaar voor die datum van die eksamen vir die bekwaamheidsertifikaat.

(LET WEL.—Ondervermelde liggame en verenigings is deur die Direkteur goedgekeur:—

Die St. John-ambulansvereniging.
Die S.A. Rooikruisvereniging.
Die Suid-Afrikaanse Noodhulp Liga.

As die kandidaat nie in besit van so 'n eerstehulp-bekwaamheidsertifikaat is nie, moet hy, voordat hy die eksamen vir 'n bekwaamheidsertifikaat wil aflê, betyds by die plaaslike sekretaris van die goedgekeurde liggaam of vereniging of by 'n goedgekeurde geneesheer aansoek doen om die instruksies en eksaminering van kandidate in eerstehulp, wat dan inligting aan hom sal verstrek aangaande die beskikbare fasiliteite. 'n Lys van die adresse van plaaslike sekretarisse van goedgekeurde liggame of verenigings is by die bevoegde beampte verkrygbaar.)

GESIGSTOETSE VIR KLEUR EN VORM.

15. (1) 'n Kandidaat vir 'n bekwaamheidsertifikaat as gesagvoerder of navigasie-offisier moet, alvorens 'n sertifikaat aan hom uitgereik word, in die voorgeskrewe gesigstoetse vir kleur en vorm, soos in Aanhangsel B van hierdie regulasies uiteengesit, slaag; met dien verstande dat, as dit om enige rede vir die kandidaat nodig is om met die skriftelike of mondelinge gedeeltes van die eksamen voort te gaan alvorens hy die toetse ondergaan, sodanige eksamen gekanselleer word as hy in enigeen van die genoemde toetse druip; met dien verstande voorts dat 'n kandidaat wat in besit is van 'n bekwaamheidsertifikaat as gesagvoerder, navigasie-offisier, skipper, stuurman of bootsman nie opnuut eksamen in die lanterntoets hoef af te lê nie.

(2) 'n Sertifikaat dat 'n kandidaat in die gesigstoets vir kleur en vorm geslaag het, is slegs vir drie maande geldig.

(3) Iemand wat vir kleur en vorm getoets wil word, moet op vorm M.4, soos in Aanhangsel A uiteengesit, by die bevoegde beampte aansoek doen en twee sjelings en ses pennies daarvoor betaal. Hierdie gelde is telkens by die eksaminering van 'n kandidaat betaalbaar.

(LET WEL.—Alle persone wat in die handelsvloot diens doen of voornemens is om daarin diens te doen, kan aan die gesigstoetse vir kleur en vorm deelneem, en al dergelike persone word aangeraai om so speedig moontlik die feit vas te stel dat hul gesigsvermoë sodanig is dat dit hulle in staat stel om in die gesigstoetse vir kleur en vorm, wat voorgeskryf word vir kandidate vir sertifikate as gesagvoerder en navigasie-offisier, te slaag.)

WANGEDRAG VAN KANDIDATE.

16. (1) In die geval van 'n kandidaat wat—

- (a) na ondertekening van die ooreenkoms met die bemanning versuim het om by sy skip aan te sluit; of
- (b) van sy skip gedros het nadat hy aangesluit het; of
- (c) deur 'n wetlike geregshof skuldig bevind is aan 'n misdryf waarvoor hy tot gevangenisstraf sonder die keuse van 'n boete veroordeel is, of wat, na die mening van die eksaminator, 'n ernstige misdryf is; of

- (d) has been found guilty of an offence in respect of which an entry has been made in the official log-book in terms of paragraph (b) of section *one hundred and eighty-three* of the Act and which the examiner considers to be of a serious nature,

the testimonials required in terms of regulation 10 shall cover the period of two years subsequent to such misconduct; provided that upon the application of the candidate the Director, after having investigated the matter, may in his discretion reduce the period.

(2) If at any time it is reported to the Director that a candidate has offered any sum of money or other thing whatsoever to any examiner or any other person employed under the Act for the purpose of influencing him in any

manner in relation to an examination, the Director shall enquire into the matter, and if he is satisfied that the candidate has made such an offer for the said purpose, he may refuse to permit the candidate to be examined or, if the examination has already commenced, may direct the examiner not to proceed with the examination, or, if the examination has already been completed, may cancel the result thereof, and may order the forfeiture of any fee paid by the candidate, and may refuse to allow him to present himself at any future examination in the Union for a period not exceeding twelve months from the date of the making of such offer.

CHAPTER II.

AGE LIMITS AND QUALIFICATIONS REQUIRED FOR CERTIFICATES OF COMPETENCY.

SECOND NAVIGATING OFFICER OF A FOREIGN-GOING SHIP.

17. The candidate shall be not less than twenty years of age, and shall have the equivalent of at least four years' sea service on deck in ships making long voyages.

CHIEF NAVIGATING OFFICER OF A FOREIGN-GOING SHIP.

18. (1) The candidate shall be not less than twenty-one and a half years of age and shall have the equivalent of at least five and a half years' sea service on deck in ships making long voyages.

(2) The period of sea service prescribed by paragraph (1) of this regulation shall, subject to the provisions of paragraph (2) of regulation 26, include either—

- (a) eighteen months in a capacity not lower than that of third of three watch-keeping officers on ships making long voyages; or
- (b) two years and three months in a capacity not lower than that of first navigating officer on ships making short voyages;

whilst holding a certificate not lower than that of Second Navigating Officer of a foreign-going ship.

(3) An application by a candidate for the acceptance of the period of sea service referred to in sub-paragraph (b) of paragraph (2) performed as second or third navigating officer on ships making short voyages will be considered on its merits. The acceptance of such service will be subject to the following conditions:—

- (a) An adequate proportion of the time shall have been spent in actual service at sea;
- (b) the service must have involved real responsibility and an adequate proportion of it must have been spent in sole charge of a watch at sea; and
- (c) the service must have been performed whilst holding a certificate not lower than that of Second Navigating Officer of a foreign-going ship.

- (d) skuldig bevind is aan 'n misdryf ten opsigte waarvan 'n inskrywing in die amptelike skeepsjoernaal gemaak is kragtens paragraaf (b) van artikel *eenhonderd drie-en-tagtig* van die Wet, en wat, na die mening van die eksaminator, 'n ernstige misdryf is,

dek die getuigskrifte wat ingevolge regulasie 10 vereis word die tydperk van twee jaar volgende op sodanige wangedrag; met dien verstande dat op aansoek van die kandidaat die Direkteur, nadat hy die saak ondersoek het, die tydperk na goëddunke kan verminder.

(2) As daar te eniger tyd aan die Direkteur gerapporteer word dat 'n kandidaat aan 'n eksaminator of enige ander persoon wat ingevolge hierdie Wet in diens is, geld of iets anders aangebied het met die doel om hom enigerwyse in

verband met die eksaminering te beïnvloed, doen die Direkteur ondersoek, en as hy oortuig is dat die kandidaat met dié doel so 'n aanbod gemaak het, kan hy weier dat die kandidaat geëksamineer word, of as daar reeds met die eksamen 'n aanvang gemaak is, kan hy die eksaminator gelas om die eksaminering te staak, of as dit reeds voltooi is, kan hy die uitslag daarvan kanselleer en gelas dat die gelde wat deur die kandidaat betaal is verbeurd verklaar word en weier dat hy weer in die Unie gedurende 'n tydperk van hoogstens twaalf maande, gereken vanaf die datum van sodanige aanbod, tot die aflê van 'n eksamen toegelaat mag word.

HOOFSTUK II.

OUDERDOMSGRENS EN VEREISTE KWALIFIKASIES VIR BEKWAAMHEIDSERTIFIKATE.

TWEEDE NAVIGASIE-OFFISIER VAN 'N SKIP OP VREEMDE VAART.

17. Die kandidaat moet minstens twintig jaar oud wees en diens gedoen het wat gelyk is aan minstens vier jaar seediens op dek in skepe wat lang seereise onderneem.

HOOFNAVIGASIE-OFFISIER VAN 'N SKIP OP VREEMDE VAART.

18. (1) Die kandidaat moet minstens een-en-twintig en 'n half jaar oud wees, en diens gedoen het wat gelyk is aan minstens vyf en 'n half jaar seediens op dek in skepe wat lang seereise onderneem.

(2) Die tydperk van seediens by paragraaf (1) van hierdie regulasie voorgeskrif moet, behoudens die bepalings van paragraaf (2) van regulasie 26, die volgende insluit:—

- (a) agtien maande in 'n hoedanigheid nie laer nie as die van derde van drie waghou-offisiere op skepe wat lang seereise onderneem; of
- (b) twee jaar en drie maande in 'n hoedanigheid nie laer nie as die van eerste navigasie-offisier op skepe wat kort seereise onderneem;

terwyl hy in besit was van 'n sertifikaat nie laer nie as die van tweede navigasie-offisier van 'n skip op vreemde vaart.

(3) Aansoek deur 'n kandidaat vir die aanvaarding van die in sub-paragraaf (b) van paragraaf (2) vermelde seediens, uitgedien as tweede of derde navigasie-offisier op skepe wat kort seereise onderneem, sal op sy meriete oorweeg word. Die aanvaarding van sodanige diens sal onderworpe wees aan die volgende voorwaardes:—

- (a) 'n Voldoende gedeelte van die tyd moet in werklike seediens uitgedien gewees het;
- (b) die diens moes werklike verantwoordelikheid meebring het en vir 'n voldoende gedeelte daarvan moes die kandidaat die enigste persoon gewees het wat in bevel was van 'n wag ter see; en
- (c) die diens moes uitgedien gewees het terwyl hy in besit was van 'n sertifikaat nie laer nie as die van tweede navigasie-offisier van 'n skip op vreemde vaart.

MASTER OF A FOREIGN-GOING SHIP.

19. (1) The candidate shall be not less than twenty-three years of age, and shall have the equivalent of at least seven years' sea service on deck in ships making long voyages.

(2) The period of sea service prescribed by paragraph (1) shall include either—

- (a) (i) eighteen months as first watch-keeping officer on ships making long voyages where the officer is next in seniority to the master; or
- (ii) twenty-one months as first watch-keeping officer on ships making long voyages where the officer is not next in seniority to the master; or
- (iii) twenty-one months as second watch-keeping officer on ships making long voyages and carrying only two watch-keeping officers; or
- (iv) twenty-four months as second or third watch-keeping officer on ships making long voyages and carrying more than two watch-keeping officers; or
- (v) twenty-seven months in a capacity not lower than that of first navigating officer on ships of one hundred or more gross register tons making short voyages; whilst holding a certificate not lower than that of Chief Navigating Officer of a foreign-going ship; or
- (b) three years as master of a ship making short voyages whilst holding a certificate as Master of a coasting ship of one hundred or more gross register tons.

(3) An application by a candidate for the acceptance of sea service performed as second navigating officer on ships making short voyages will be considered on its merits. The acceptance of such service will be subject to the following conditions:—

- (a) The service must have been service in sole charge of a watch at sea;
- (b) the service must have been performed whilst holding a certificate not lower than that of Chief Navigating Officer of a foreign-going ship; and
- (c) the service reckoned under this paragraph shall not amount to more than one-third of the time required, and the rest of the time required shall have been served in ships making long voyages.

NAVIGATING OFFICER OF A COASTING SHIP OF ONE HUNDRED OR MORE GROSS REGISTER TONS.

20. A candidate shall be not less than twenty years of age, and shall have the equivalent of at least four years' sea service on deck.

MASTER OF A COASTING SHIP OF ONE HUNDRED OR MORE GROSS REGISTER TONS.

21. (1) The candidate shall be not less than twenty-three years of age, and shall have the equivalent of at least five years' sea service on deck.

(2) The period of sea service prescribed by paragraph (1) shall include either—

- (a) one year in a capacity not lower than that of first navigating officer of ships making short voyages; or
- (b) one and a half years in a capacity not lower than that of second navigating officer in charge of a watch on ships making short voyages; or
- (c) one and a half years in a capacity not lower than that of third navigating officer in charge of a watch on ships making long voyages; or

GESAGVOERDER VAN 'N SKIP OP VREEMDE VAART.

19. (1) Die kandidaat moet minstens drie-en-twintig jaar oud wees en diens gedoen het wat gelyk is aan minstens sewe jaar seediens op dek in skepe wat lang seereise onderneem.

(2) Die tydperk van seediens by paragraaf (1) voorgeskryf moet die volgende insluit:—

- (a) (i) Agtien maande as eerste waghout-offisier op skepe wat lang seereise onderneem waar die offisier na die gesagvoerder die volgende in voorrang was; of
- (ii) een-en-twintig maande as eerste waghout-offisier op skepe wat lang seereise onderneem waar die offisier nie na die gesagvoerder in voorrang was nie; of
- (iii) een-en-twintig maande as tweede waghout-offisier op skepe wat lang seereise onderneem en slegs twee waghout-offisiere in diens het; of
- (iv) vier-en-twintig maande as tweede of derde waghout-offisier op skepe wat lang seereise onderneem en meer as twee waghout-offisiere in diens het; of
- (v) sewe-en-twintig maande in 'n hoedanigheid nie laer nie as die van eerste navigasie-offisier op skepe van eenhonderd of meer bruto-registerton wat kort seereise onderneem,

terwyl hy in besit was van 'n sertifikaat nie laer nie as die van hoof-navigasie-offisier van 'n skip op vreemde vaart, of—

(b) drie jaar as gesagvoerder van 'n skip wat kort seereise onderneem terwyl hy in besit was van 'n sertifikaat as gesagvoerder van 'n kusvaarder van eenhonderd of meer bruto-registerton.

(3) Aansoek deur 'n kandidaat vir die aanvaarding van seediens uitgedien as tweede navigasie-offisier op skepe wat kort seereise onderneem, sal op sy meriete oorweeg word. Die aanvaarding van sodanige diens sal onderworpe wees aan die volgende voorwaardes:—

- (a) Die diens moes uitgedien gewees het toe hy alleen in bevel was van 'n wag ter see;
- (b) die diens moes verrig gewees het terwyl hy in besit was van 'n sertifikaat nie laer nie as die van hoof-navigasie-offisier van 'n skip op vreemde vaart; en
- (c) die diens volgens hierdie paragraaf bereken mag nie meer as een derde van die tyd wat vereis word, beloop nie, en die res van die tyd wat vereis word, moes uitgedien gewees het in skepe wat lang seereise onderneem.

NAVIGASIE-OFFISIER VAN 'N KUSVAARDER VAN HONDERD OF MEER BRUTO-REGISTERTON.

20. 'n Kandidaat moet minstens twintig jaar oud wees en moet diens gedoen het wat gelyk is aan minstens vier jaar seediens op dek.

GESAGVOERDER VAN 'N KUSVAARDER VAN EENHONDERD OF MEER BRUTO-REGISTERTON.

21. (1) Die kandidaat moet minstens drie-en-twintig jaar oud wees en diens gedoen het wat gelyk is aan minstens vyf jaar seediens op dek.

(2) Die tydperk van seediens by paragraaf (1) voorgeskryf moet die volgende insluit:—

- (a) Een jaar in 'n hoedanigheid nie laer nie as die van eerste navigasie-offisier van skepe wat kort seereise onderneem; of
- (b) een en 'n half jaar in 'n hoedanigheid nie laer nie as die van tweede navigasie-offisier in bevel van 'n wag op skepe wat kort seereise onderneem; of
- (c) een en 'n half jaar in 'n hoedanigheid nie laer nie as die van derde navigasie-offisier in bevel van 'n wag op skepe wat lang seereise onderneem; of

- (d) two and a half years in a capacity not lower than that of third navigating officer in charge of a watch on ships making short voyages,

whilst holding a certificate not lower than that of Navigating Officer of a coasting ship of one hundred or more gross register tons.

COMPARATIVE VALUE OF CERTIFICATES.

22. Whenever the question arises whether any certificate is not lower than any other certificate, that question shall be determined by the Director.

[NOTE.—For purposes of these regulations, where in a candidate's record book the rank—

- (a) mate or second mate is used in respect of service in a foreign-going ship it will be accepted as equivalent to service as Chief or Second Navigating Officer, as the case may be, of a foreign-going ship;
- (b) mate is used in respect of service in a coasting ship of one hundred or more gross register tons it will be accepted as equivalent to service as Navigating Officer of a coasting ship of 100 or more gross register tons.]

CHAPTER III.

HOW SEA SERVICE IS CALCULATED.

GENERAL.

23. (1) In all cases the onus of producing acceptable proof of sea service shall rest upon the candidate claiming such service.

(2) Sea service shall be reckoned from the commencement of the voyage to its termination, and, except as hereinafter provided, shall be performed in the Deck Department.

(3) Except in cases where the acceptance of certain types of non-trading service is provided for by these regulations, the qualifying service for all certificates of competency as Master and Navigating Officer shall be service performed in ordinary trading vessels.

(4) The Director may order that service which has been performed in vessels other than ordinary trading vessels, or the acceptance of which is not provided for in these regulations, shall be recognised as sea service, and may determine what proportion of service so spent shall be counted as sea service.

(5) The candidate's service, as shown on his discharges, shall be reckoned by the calendar month, i.e. the time included between any given day in any month and the preceding day of the following month, both inclusive. The number of complete months from the commencement of the period, ascertained in this way, shall be computed, after which the number of odd days shall be counted. The day on which the agreement commences, as well as that on which it terminates, shall both be included, and all odd days added together and reckoned at 30 to the month.

NATURE AND PERIOD OF SERVICE DETERMINED BY REFERENCE TO AGREEMENT WITH THE CREW.

24. (1) Sea service shall not be regarded as qualifying for examination for certificates of competency, unless it can be verified by reference to the agreement with the crew of the ship in which it was performed.

- (d) twee en 'n half jaar in 'n hoedanigheid nie laer nie as die van derde navigasie-offisier in bevel van 'n wag op skepe wat kort seereise onderneem;

terwyl hy in besit was van 'n sertifikaat nie laer nie as die van navigasie-offisier van 'n kusvaarder van eenhonderd of meer bruto-registerton.

VERGELYKENDE WAARDE VAN SERTIFIKATE.

22. Wanneer die vraag ontstaan of 'n sertifikaat nie laer is as enige ander sertifikaat nie, word die saak deur die Direkteur beslis.

[LET WEL.—Vir die toepassing van hierdie regulasies, sal die volgende prosedure gevolg word:—

- (a) waar daar in die kandidaat se aantekeningboek die rang van stuurman of tweede stuurman gebruik word ten opsigte van diens in 'n skip op vreemde vaart, sal dit aanvaar word as gelyk aan diens as hoof- of tweede navigasie-offisier, na gelang van die geval, van 'n skip op vreemde vaart;
- (b) waar daar in die kandidaat se aantekeningboek die rang van stuurman gebruik word ten opsigte van diens in 'n kusvaarder van honderd of meer bruto-registerton, sal dit aanvaar word as gelyk aan diens as navigasie-offisier van 'n kusvaarder van honderd of meer bruto-registerton.]

HOOFSTUK III.

HOE SEEDIENS BEREKEN WORD.

ALGEMEEN.

23. (1) In alle gevalle rus die bewyslas dat bevredigende seediens verrig was, op die kandidaat wat daarop aanspraak maak.

(2) Seediens word bereken vanaf die aanvang van 'n seereis tot by die beëindiging daarvan en, behalwe soos hierna bepaal, moet dit in die dekdepartement gedoen word.

(3) Behalwe in gevalle waar daar by hierdie regulasies voorsiening gemaak word vir die aanvaarding van sekere soorte diens wat gedoen is in ander skepe behalwe handelskepe, sal die kwalifiserende diens vir alle bekwaamheid-sertifikate as gesagvoerder en navigasie-offisier diens wees wat verrig is op gewone handelskepe.

(4) Die Direkteur kan gelas dat diens wat gedoen is in skepe, uitgesonderd handelskepe, of die aanvaarding van diens waarvoor daar nie by hierdie regulasies voorsiening gemaak word nie, as seediens erken moet word, en kan bepaal watter gedeelte van die diens wat aldus verrig is, as seediens bereken sal word.

(5) Die kandidaat se diens, soos in sy ontslagsertifikaat aangetoon, word volgens kalendermaande gereken, d.w.s. die tyd ingesluit tussen enige bepaalde dag in enige maand en die voorafgaande dag van die volgende maand, albei ingesluit. Die aantal volle maande vanaf die aanvang van die tydperk, wat aldus vasgestel word, word bereken, en daarna word die aantal dae wat oorbly getel. Die dag waarop die ooreenkoms 'n aanvang neem, sowel as die dag waarop dit beëindig word, word albei ingesluit, en al die oorblywende dae word bymekaar getel en gereken teen 30 dae per maand.

AARD EN TYDPERK VAN DIENS WORD BEPAAL DEUR RAADPLEGING VAN OOREENKOMS MET DIE BEMANNING.

24. (1) Daar word nie geag dat seediens kwalifiseer vir eksaminering vir bekwaamheid-sertifikate nie, tensy dit geverifieer kan word deur raadpleging van die ooreenkoms met die bemanning van die skip waarin die diens verrig is.

(2) Whenever the sea service claimed by a candidate as a qualification for examination for a certificate of competency does not accord with the entries in his seaman's record book or whenever for any other reason any doubt exists in the mind of the Examiner as to the capacity in which or the period during which any such service was performed, reference shall be made to the agreement with the crew of the ship, and the statements contained in that agreement shall be regarded as decisive.

WHAT PROPORTION OF TIME SPENT ON LONG AND SHORT VOYAGES RESPECTIVELY MAY BE ACCEPTED.

25. (1) Subject to the provisions of these regulations, the whole of the time spent in service on ships making long voyages shall be accepted for the purposes of regulations 17, 18, 19, 20 and 21.

(2) Subject to the provisions of these regulations, the time spent in service on ships making short voyages shall, for the purposes of regulations 20 and 21, be accepted in full, and, for the purposes of regulations 17, 18 and 19, be regarded as equivalent to two-thirds of the time spent in service on ships making long voyages.

CERTIFICATES OF WATCHKEEPING SERVICE.

26. (1) In every case where watchkeeping service is required, the next nature of the candidate's service shall be clearly established by one or more certificates of watchkeeping service in the form M.8 set forth in Annexure A, signed by the master.

(2) Subject to the provisions of paragraph (3), a candidate for a certificate of competency as Chief Navigating Officer of a foreign-going ship shall prove that of the eighteen months' watchkeeping service required by sub-paragraph (a) of paragraph (2) of regulation 18 at least nine months were spent in full charge, or in effective charge, of a watch for not less than eight hours out of every twenty-four hours' service claimed, or, as the case may be, that of the two years and three months' watchkeeping service required by sub-paragraph (b) of that paragraph at least thirteen and a half months were spent in full charge, or in effective charge, of a watch for not less than eight hours out of every twenty-four hours' service claimed.

(3) If a candidate for a certificate of competency as Chief Navigating Officer of a foreign-going ship is the senior of two officers keeping a doubled watch, he may count towards the period of watchkeeping service required the whole of the watch, but if he is the junior of the two, he may count only two-thirds of the time so served, up to a maximum of half the watchkeeping service required [e.g. on ships making long voyages, up to thirteen and a half months' actual service, being the equivalent of nine months towards the eighteen months' watchkeeping service required by sub-paragraph (a) of paragraph (2) of regulation 18].

(4) Subject to the provisions of paragraph (5), a candidate for a certificate of competency as Master of a foreign-going ship shall prove that during the whole of the watchkeeping service required by paragraph (2) of regulation 19 he served in full charge of a watch for eight hours out of every twenty-four hours' service claimed.

(5) If a candidate for a certificate of competency as Master of a foreign-going ship is the senior of two watchkeeping officers keeping a doubled watch, he may count towards the period of watchkeeping service required the whole of the watch. If he is the junior of the two, he shall not count any of the time during which watches were doubled, but may count the whole of the watchkeeping time served during which watches were not doubled.

(2) Wanneer die seediens waarop 'n kandidaat aanspraak maak as 'n kwalifikasie vir eksamen vir 'n bekwaamheidsertifikaat nie met die inskrywings in sy seeman se verslagboek ooreenstem nie of wanneer daar om enige ander rede twyfel by die eksaminator bestaan aangaande die hoedanigheid of die tydperk waarin enige sodanige seediens verrig was, moet die ooreenkoms met die bemanning van die skip geraadpleeg word, en die verklarings wat in daardie ooreenkoms vervat is, word geag beslissend te wees.

GEDEELTE VAN TYD ONDERSKEIDELIK OP LANG EN KORT SEEREISE DEURGEBRING WAT AANVAAR MAG WORD.

25. (1) Behoudens die bepalings van hierdie regulasies, word die hele dienstyd op skepe wat lang seereise onderneem vir die toepassing van regulasies 17, 18, 19, 20 en 21 aanvaar.

(2) Behoudens die bepalings van hierdie regulasies word die dienstyd op skepe wat kort seereise onderneem vir die toepassing van regulasies 20 en 21 ten volle aanvaar, en, vir die toepassing van regulasies 17, 18 en 19, word dit geag as gelyk aan twee-derdes van die dienstyd op skepe wat lang seereise onderneem.

WAGHOU-DIENSSERTIFIKATE.

26. (1) In elke geval waar waghoudiens vereis word, moet die presiese aard van die kandidaat se diens duidelik vasgestel word deur middel van een of meer waghoudienssertifikate in die vorm M.8 wat in Aanhangsel A uiteengesit word, en die sertifikate moet deur die gesagvoerder geteken wees.

(2) Behoudens die bepalings van paragraaf (3), moet 'n kandidaat vir 'n bekwaamheidsertifikaat as hoof navigasie-offisier van 'n skip op vreemde vaart bewys dat hy minstens nege van die agtien maande se waghoudiens wat by subparagraaf (a) van paragraaf (2) van regulasie 18 vereis word, deurgebring het in volle bevel, of in effektiewe bevel, van 'n wag vir minstens agt uit elke vier-en-twintig uur se diens waarop daar aanspraak gemaak word, of, na gelang van die geval, dat hy minstens dertien en 'n half maande van die twee jaar en drie maande se waghoudiens wat by subparagraaf (b) van daardie paragraaf vereis word, deurgebring het in volle bevel, of in effektiewe bevel, van 'n wag vir minstens agt uit elke vier-en-twintig uur se diens waarop daar aanspraak gemaak word.

(3) As 'n kandidaat vir 'n bekwaamheidsertifikaat as hoofnavigasie-offisier van 'n skip op vreemde vaart die senior is van twee offisiere wat verdubbelde waghoudiens verrig, mag hy die hele waghoudienstyd reken vir die tydperk van waghoudiens wat vereis word, maar as hy die junior van die twee offisiere is, mag hy slegs twee-derdes van die waghoudiens wat hy aldus verrig het, reken, tot op 'n maksimum van helfte van die waghoudiens wat vereis word [bv. op skepe wat lang seereise onderneem, tot op dertien en 'n half maande werklike diens, wat gelykstaande is aan nege maande vir die doel van die agtien maande waghoudiens wat by subparagraaf (a) van paragraaf (2) van regulasie 18 vereis word].

(4) Behoudens die bepalings van paragraaf (5), moet 'n kandidaat vir 'n bekwaamheidsertifikaat as gesagvoerder van 'n skip op vreemde vaart bewys dat hy gedurende die hele tydperk van waghoudiens wat by paragraaf (2) van regulasie 19 vereis word, in volle bevel van 'n wag vir agt uur uit elke vier-en-twintig uur se diens waarop daar aanspraak gemaak word, diens gedoen het.

(5) As 'n kandidaat vir 'n bekwaamheidsertifikaat as gesagvoerder van 'n skip op vreemde vaart die senior is van twee offisiere wat verdubbelde waghoudiens verrig, mag hy die hele waghoudienstyd reken vir die tydperk van waghoudiens wat vereis word. As hy die junior van die twee offisiere is, mag hy die tyd waarin die wagte verdubbel is nie reken nie, maar hy mag die hele waghoudienstyd waartydens wagte nie verdubbel is nie, reken as waghoudiens wat gedien is.

(6) In this regulation—

- (a) "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; and
- (b) "doubled watch" is a watch which is kept, or a part of which is kept, by two officers, where the senior of them takes charge during the whole or part of the watch.

PROMOTION DURING VOYAGE.

27. If during the course of the voyage a candidate has been properly promoted on the occurrence of a vacancy, from the rank in which he first shipped, and such promotion with the reasons for which it has been made has been properly entered in the official log book, he shall receive credit for his service in the higher grade for the period subsequent to his promotion.

MIXED SERVICE.

28. Where a candidate has performed his sea service in more than one capacity, or partly in ships making long voyages and partly in ships making short voyages, proportionate allowance shall be made for each kind of service, provided that in other respects such service complies with the requirements of the regulations.

EVIDENCE AS TO SERVICE IN SHIPS OTHER THAN SOUTH AFRICAN SHIPS.

29. (1) Where a candidate claims sea service in vessels not registered in the Union and such service cannot be verified by the Director, the service shall be confirmed by an official authority of the country to which the ship in which the candidate served belonged.

(2) If the sufficiency of the proofs given appears to be at all doubtful, all papers shall be referred to the Director for decision.

SERVICE AS COOK, ETC.

30. (1) Candidates whose service has been performed in capacities other than deck apprentice-officer, midshipman, deck cadet, deckboy, ordinary seaman or able seaman, boatswain and boatswain's mate—e.g. men who have served as cook in small vessels where cooking is only part of a man's duty—shall satisfy the examiner that they have, during the whole time claimed, performed deck duties in addition to their own particular work.

(2) Such service, which may be established by production of satisfactory certificates from the masters with whom the candidates served, shall only be accepted as equivalent to two-thirds of the time served.

(3) In the absence of satisfactory evidence, the applicant may be required to perform additional service in the capacity of seaman, and all cases of doubt shall be referred to the Director for decision.

(NOTE.—This regulation must be read with regulation 25. Accordingly, if a candidate for a certificate as Second or Chief Navigating Officer or Master of a foreign-going ship claims service as a cook, etc., in terms of this regulation, and such service has been performed in a ship making short voyages, not more than two-thirds of two-thirds, i.e., four-ninths of the time served may be counted.)

SERVICE AS RADIO OFFICER.

31. (1) If a candidate has signed the agreement with the crew as a deck rating, but has served both as a deck rating and as a radio officer, two-thirds of his service may

(6) In hierdie regulasie—

- (a) beteken „effektiewe bevel van 'n wag" verantwoordelikheid vir die wag, maar dit sluit nie 'n toevallige toesig deur 'n senior offisier uit nie; met dien verstande dat die senior offisier nie te eniger tyd bevel van die wag oorneem nie; en
- (b) is „verdubbelde wag" 'n wag wat gehou word, of 'n gedeelte waarvan gehou word, deur twee offisiere waar die senior van hulle gedurende die hele of gedeelte van die wag bevel oorneem.

PROMOSIE GEDURENDE SEEREIS.

27. As 'n kandidaat in die loop van 'n seereis weens die ontstaan van 'n vakature van die rang waarin hy aan boord gegaan het behoorlik gepromoveer is, en sodanige promosie met die redes waarom dit gedoen is, behoorlik in die amptelike skeepsjoernaal aangeteken is, ontvang hy na sy promosie krediet in die hoër graad vir dié dienstydsperk.

GEMENGDE DIENS.

28. Ingeval 'n kandidaat sy seediens in meer as een hoedanigheid verrig het, of gedeeltelik in skepe wat lang seereise onderneem en gedeeltelik in skepe wat kort seereise onderneem, moet elke soort diens eweredig bereken word, mits sodanige diens in ander opsigte aan die vereistes van die regulasies voldoen.

BEWYS AANGAANDE DIENS OP SKEPE, UITGESONDERD SUID-AFRIKAANSE SKEPE.

29. (1) Ingeval 'n kandidaat aanspraak maak op diens op vaartuie wat nie in die Unie geregistreer is nie, en sodanige diens nie deur die Direkteur geverifieer kan word nie, moet die diens deur 'n amptelike gesag van die land waaraan die skip behoort waarop die kandidaat diens gedoen het, bevestig word.

(2) As die bewyse onvoldoende of enigszins twyfelagtig skyn te wees, moet alle dokumente na die Direkteur vir sy beslissing verwys word.

DIENS AS KOK, ENS.

30. (1) Kandidate wat diens verrig het in ander hoedanighede behalwe die van dekleerlingoffisier, mid-skeepsman, dekkadet, dekseun, gewone matroos of volle matroos, bootsman en bootsman se maat—bv. 'n persoon wat diens gedoen het as kok in klein vaartuie waar sy dienste as kok slegs deel van sy pligte was—moet die eksaminator tevrede stel dat hulle gedurende die hele tyd waarop aanspraak gemaak word, benewens hul eie besondere werk dekdienste verrig het.

(2) Sodanige dienste wat vasgestel kan word deur die voorlegging van bevredigende sertifikate van die gesagvoerders onder wie die kandidate diens gedoen het, word slegs aanvaar as gelykstaande met twee-derdes van die dienstydsperk.

(3) By gebrek aan bevredigende bewys, kan daar vereis word dat die kandidaat bykomstige diens moet verrig in die hoedanigheid van matroos, en alle twyfelagtige gevalle moet vir beslissing na die Direkteur verwys word.

(LET WEL.—Hierdie regulasie moet saam met regulasie 25 gelees word. Gevolglik, as 'n kandidaat vir 'n sertifikaat as tweede of hoof-navigasie-offisier of gesagvoerder van 'n skip op vreemde vaart kragtens hierdie regulasie aanspraak maak op diens as 'n kok, ens., en as sodanige diens verrig is op 'n skip wat kort seereise onderneem, mag hoogstens twee-derdes van twee-derdes, d.w.s. vier-negendes, van die dienstyds getel word.)

DIENS AS RADIO-OFFISIER.

31. (1) Indien 'n kandidaat die ooreenkoms met die bemanning as 'n dek-gradering onderteken het maar diens verrig het as 'n dek-gradering sowel as radio-offisier, mag

be counted as qualifying service. The candidate shall, however, prove that, during the whole period claimed, he performed deck duties in addition to the duties of a radio officer.

(2) If a candidate has signed the agreement with the crew as a radio officer, but has performed deck duties in addition to his normal functions as a radio officer, two-thirds of such service may be counted as qualifying service; provided that the candidate produces 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 radio watch.

(3) If the candidate has signed the agreement with the crew 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.

[NOTE.—This regulation must be read with regulation 25. Thus, if a candidate for a certificate as Second or Chief Navigating Officer or Master of a foreign-going ship wishes to count time spent as a radio officer, and his service has been performed in a ship making short voyages, then, if his case falls under paragraph (1) or (2), not more than two-thirds of two-thirds, i.e., four-ninths of the time served may be counted. If his case falls under paragraph (3), not more than two-thirds of one-fourth, i.e., one-sixth of the time served may be counted.]

APPRENTICE-OFFICERS (DECK).

32. (1) The whole of the time claimed under indentures of apprenticeship shall be accepted as sea service to qualify for a certificate of competency as Second Navigating Officer of a foreign-going ship, provided—

(a) that the indentures have not been cancelled through some fault of the candidate, and they are endorsed by the owner or master to whom he was bound to the effect that he has performed his service faithfully during the time he remained an apprentice; and

(b) that the candidate has served at sea not less than four-fifths of the time claimed.

(2) In cases where an apprentice-officer is qualified for examination before the expiration of his indentures, e.g. where he has served at a training establishment approved in terms of regulation 35 or has had other sea service prior to being bound, which, together with his actual time as apprentice-officer makes up the four years' sea service required in terms of regulation 17, or where his indentures are for a period of more than four years, a letter from the owner or master shall be accepted in place of the endorsement referred to above.

(3) In the event of the candidate being short of the required four-fifths of the time claimed as apprentice-officer, he shall be required to show sufficient additional sea service, either as seaman or junior officer, to make up four-fifths of the time claimed.

[NOTE.—The general concession to apprentice-officers set out above cannot, however, be taken to cover a case in which, during a large part of the period of apprenticeship, the vessel on which the apprentice is serving has been laid up in a foreign port. The proportion of the period of apprenticeship which may be accepted as qualifying service in such a case depends on the individual circumstances and each case shall be considered on its merits

twee-derdes van sy diens as kwalifiserende diens gereken word. Die kandidaat moet egter bewys dat hy gedurende die hele dienstryd waarop aanspraak gemaak word, benevens die pligte van 'n radio-offisier dekdienste verrig het.

(2) Indien 'n kandidaat die ooreenkoms met die bemanning as 'n radio-offisier onderteken het, maar benewens sy normale werksaamhede as radio-offisier dekdienste verrig het, kan twee-derdes van sodanige diens gereken word as kwalifiserende diens, mits die kandidaat 'n sertifikaat voorlê van die gesagvoerder van die skip met die strekking dat hy gedurende die hele seereis vir 'n redelike gedeelte van die tyd elke dag dekdienste verrig het en dat hy nie meer as twee uur per dag gereeld radio-wagdiens verrig het nie.

(3) Indien die kandidaat die ooreenkoms met die bemanning as 'n radio-offisier onderteken het en slegs as sulks diens verrig het, kan een kwart van sy diens as kwalifiserende diens gereken word, tot op 'n maksimum van twaalf maande kwalifiserende diens.

[LET WEL.—Hierdie regulasie moet saam met regulasie 25 gelees word. Dus, as 'n kandidaat vir 'n sertifikaat as tweede of hoof-navigasie-offisier of gesagvoerder van 'n skip op vreemde vaart verlang dat dienstryd as 'n radio-offisier getel moet word, en as sy dienste verrig was in 'n skip wat kort seereise onderneem, dan, as sy geval onder paragraaf (1) of (2) val, mag hoogstens twee-derdes van twee-derdes, d.w.s. vier-negendes, van die dienstryd getel word. As sy geval onder paragraaf (3) val, mag hoogstens twee-derdes van een-vierde, d.w.s. een-sesde, van die dienstryd getel word.]

LEERLING-OFFISIERS (DEK).

32. Die hele tyd waarop ingevolge leerkontrakte aanspraak gemaak word, word as kwalifiserende diens vir bekwaamheidsertifikate as tweede navigasie-offisier van 'n skip op vreemde vaart aanvaar, mits—

(a) die leerkontrak nie weens een of ander fout van die kandidaat gekanselleer is nie en hulle deur die eienaar of diensheer aan wie hy verbind is, geëndosseer is met die strekking dat hy sy diens gedurende die tyd wat hy leerling was, getrou verrig het; en

(b) dat die kandidaat minstens vier-vyfdes van die tyd waarop hy aanspraak maak ter see diens gedoen het.

(2) In gevalle waar 'n leerling-offisier gekwalifiseer het vir eksaminering voor die verstryking van sy leerkontrak, bv. in gevalle waar hy diens gedoen het by 'n opleidings-inrigting wat ingevolge regulasie 35 goedgekeur is of ander diens ter see verrig het voordat hy hom verbind het wat, tesame met sy werklike dienstryd as leerling-offisier, die vier jaar van seediens saamstel wat ingevolge regulasie 17 vereis word, of in gevalle waar sy leerkontrak oor 'n tydperk van meer as vier jaar strek, word 'n brief van die eienaar of diensheer aanvaar in die plek van die endossement waarvan hierbo melding gemaak is.

(3) In gevalle waar die kandidaat nie die vereiste vier-vyfdes van die dienstryd as leerling-offisier waarop aanspraak gemaak word, uitgedien het nie, word van hom verlang dat hy bewys moet lewer van voldoende addisionele diens ter see, of as matroos of as junior offisier, om vier-vyfdes van die tyd waarop aanspraak gemaak word, te voltooi.

[LET WEL.—Daar kan egter nie beskou word dat die algemene toegewing aan leerling-offisiere wat hierbo uiteengesit is, 'n geval dek waar die vaartuig aan boord waarvan die leerling diens verrig, vir 'n groot gedeelte van die leerling-tydperk in 'n vreemde hawe vertraag is nie. Die gedeelte van die tydperk van leerlingenskap wat in so 'n geval as kwalifiserende diens aanvaar mag word hang af van die individuele omstandighede en elke geval word volgens meriete oorweeg. Die toegewing vir sodanige

As generous an allowance for such service as can properly be made will be given, but it is essential that candidates for certificates of competency shall have sufficient experience of actual service at sea).

(NOTE.—This regulation must be read with regulation 25. Accordingly, if the service under indentures of apprenticeship was performed in ships making short voyages, only two-thirds of the time served may be counted.)

CADETS.

33. Time served as cadet shall be accepted subject to the same conditions and restrictions as those laid down for apprentice-officers by regulation 32; provided that the service as cadet has been continuous, that on the date of the termination of the period of service claimed in this capacity the candidate was bound by an agreement with the crew or was serving at a training establishment approved in terms of regulation 35, and that he complies with the requirements of the said regulation in serving or making up the four-fifths period at sea during the time claimed.

(NOTE.—Service as a midshipman in the Merchant Navy will be accepted as equivalent to service as a cadet.)

PROMOTION DURING THE SERVICE OF AN APPRENTICE-OFFICER OR CADET.

34. Where an apprentice-officer or cadet is promoted to uncertified junior officer in the same company, for the last year of apprenticeship or cadetship, such officer's service shall be treated, for the purpose of assessing sea service, as apprentice-officer or cadet service.

TRAINING ESTABLISHMENTS.

35. Time served after the attainment of the age of fourteen years at a training establishment, whether on shore or not, which has been approved by the Director, shall count towards the period of qualifying sea service required for a certificate of competency; provided that—

- the candidate produces a satisfactory certificate from the principal or other person in charge of the establishment to the effect that the candidate has completed the course of training provided by the establishment and testifying to his good conduct and proficiency up to the time of his leaving the establishment;
- the Director shall determine in respect of each establishment approved by him what proportion of the time spent at that establishment shall count towards qualifying sea service;
- no length of service at a training establishment shall be equivalent to more than one year's sea service; and
- time spent at approved training establishments shall not be accepted in lieu of any part of the service as certificated officer required by regulations 18, 19 or 21; nor in lieu of sea service required in terms of paragraph (2) of regulation 38.

[NOTE.—(1) The following table shows the training establishment approved by the Director and the proportion of the time spent thereat which is to count towards qualifying sea service:—

Training Establishment.	Proportion of Time counted as Sea Service.
In the Union— South African Nautical College "General Botha", Gordons Bay	Half time up to twelve months.

(2) The Director will, on application, consider the recognition of other training establishments; provided he is satisfied that the training provided justifies time spent

diens sal so liberaal wees as wat moontlik gemaak kan word, maar dit is noodsaaklik dat kandidate vir bekwaamheidsertifikate voldoende ondervinding van werklike diens ter see moet opdoen.)

(LET WEL.—Hierdie regulasie moet saam met regulasie 25 gelees word. Gevolglik, as die diens kragtens leerkontrak verrig was in skepe wat kort seereise onderneem, mag slegs twee-derdes van die dienstyd getel word.)

KADETTE.

33. Die dienstydperk as kadet word aanvaar onderworpe aan dieselfde voorwaardes en beperkings as dié wat by regulasie 32 vir leerling-offisiere neergelê is, op voorwaarde dat die dienstydperk as kadet ononderbroke was, dat die kandidaat by die beëindiging van die dienstydperk waarop hy in hierdie hoedanigheid aanspraak maak, verbind was deur 'n ooreenkoms met die bemanning of diens gedoen het by 'n opleidingsinrigting wat ingevolge regulasie 35 goedgekeur is, en dat hy voldoen aan die vereistes van genoemde regulasie wat betref diens vir of die voltooiing van die vier-vyfdes-tydperk ter see gedurende die tyd waarop hy aanspraak maak.

(LET WEL.—Diens wat as midskeepsman in die handelsvloot verrig is, sal aanvaar word as gelykstaande met diens wat as kadet verrig word.)

PROMOSIE GEDURENDE DIE DIENSTYD VAN 'N LEERLING-OFFISIER OF KADET.

34. As 'n leerling-offisier of kadet vir die laaste jaar van sy leerlingenskap of kadetenskap tot ongediplomeerde junior offisier in dieselfde redery gepromoveer word, word so 'n offisier se diens, vir die doel om sy seediens te bereken, as leerling-offisier- of kadetdiens behandel.

OPLEIDINGSINRIGTINGS.

35. Diens wat by 'n opleidingsinrigting na die bereiking van die ouderdom van veertien jaar verrig is, ditsy op land of nie, en deur die Direkteur goedgekeur is, word in aanmerking geneem by die berekening van die tydperk wat vir kwalifiserende seediens vir 'n bekwaamheidsertifikaat nodig is; met dien verstande dat—

- die kandidaat 'n bevredigende sertifikaat van sy prinsipaal of ander verantwoordelike persoon van die inrigting voorlê met die strekking dat hy die opleidingskursus aan die inrigting voltooi het en waarin getuig word van sy goeie gedrag en bekwaamheid tot op die datum waarop hy die inrigting verlaat het;
- die Direkteur ten opsigte van elke inrigting wat deur hom goedgekeur is, moet vasstel watter gedeelte van die tyd wat by daardie inrigting bestee is, as kwalifiserende seediens moet tel;
- geen dienstyd by 'n opleidingsinrigting gelyk mag wees aan meer as een jaar seediens nie; en
- diens wat by goedgekeurde opleidingsinrigtings verrig is, word nie in plaas van enige deel van die diens as gediplomeerde offisier wat volgens regulasies 18, 19 of 21 vereis word, aanvaar nie; ook nie in plaas van seediens wat kragtens paragraaf (2) van regulasie 38 vereis word nie.

[LET WEL.

(1) Onderstaande is 'n tabel van die opleidingsinrigting wat deur die Direkteur goedgekeur is en van die gedeelte van die tyd wat daar bestee is wat as kwalifiserende seediens mag tel:—

Opleidingsinrigting.	Gedeelte van tyd wat as seediens getel word.
In die Unie— Suid-Afrikaanse Seevaartkollege "Generaal Botha", Gordonsbaai.	Halfte van die tyd tot twaalf maande.

(2) Die Direkteur sal by aansoek die erkenning van ander opleidingsinrigtings oorweeg, mits hy oortuig is dat die opleiding waarvoor daar voorsiening gemaak word dit

there being allowed to count towards qualifying sea service, and will give special consideration to the recognition of training establishments recognised by the Ministry of Transport and Civil Aviation of the United Kingdom.]

SERVICE IN FISHING VESSELS.

36. (1) Service performed exclusively in fishing, sealing or shore-based whaling boats of one hundred or more gross register tons shall count at two-thirds rate towards qualifying for a certificate of competency as Second Navigating Officer of a foreign-going ship and shall count in full for certificates of competency for officers in coasting ships of one hundred or more gross register tons.

(2) In addition to such service in fishing, sealing or shore-based whaling boats, the candidate shall produce proof of the following sea-service:—

(a) for a certificate of competency for officers in foreign-going ships—

(i) at least eighteen months in ships making long voyages; or

(ii) at least twenty-seven months in ships making short voyages; or

(b) for a certificate of competency for officers in coasting ships of one hundred or more gross register tons, at least twelve months in ships making long or short voyages.

(3) Service in fishing, sealing or shore-based whaling boats of less than one hundred gross register tons shall for purposes of these regulations be accepted as qualifying for a certificate of competency as Navigating Officer of a coasting ship of one hundred or more gross register tons.

CHAPTER IV.

SUCCESS AND FAILURE IN EXAMINATION.

PERCENTAGE PASS.

37. To secure a pass in the written portion of the examination, a candidate shall be required to obtain the appropriate percentage pass in the subjects shown in the following tables and also to obtain seventy 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 are as follows:—

(1) Second Navigating Officer of a foreign-going ship.

	Time.	Marks.	Percentage 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. Language.....	1½ hrs.	100	50%
	—	1,000	70%
Fourth or subsequent days.....	Orals.		

regverdig dat die tyd wat daar bestee is vir kwalifiserende seediens in aanmerking geneem kan word, en hy sal besondere oorweging skenk aan die erkenning van opleidings-inrigtings wat deur die Ministerie van Vervoer en Burgerlike Lugvaart van die Verenigde Koninkryk erken word.]

DIENS IN VISSERSBOTE.

36. (1) Diens wat uitsluitend in vissersbote, robbe- of walvisvaarders, met landbasis, van eenhonderd of meer bruto registerton, verrig word, sal getel word as tweederdes van die tyd wat kwalifiseer vir 'n bekwaamheidsertifikaat as tweede navigasie-offisier van 'n skip op vreemde vaart en sal voltyds tel vir bekwaamheidsertifikaat vir offisiere in kusvaarders van eenhonderd of meer bruto registerton.

(2) Benewens sodanige diens wat in vissersbote, robbe- of walvisvaarders, met landbasis, verrig is, moet die kandidaat bewys lewer van die volgende seediens:—

(a) Vir 'n bekwaamheidsertifikaat vir offisiere in skeep op vreemde vaart—

(i) minstens agtien maande in skepe wat lang seereise onderneem; of

(ii) minstens sewe-en-twintig maande in skepe wat kort seereise onderneem; of

(b) vir 'n bekwaamheidsertifikaat vir offisiere in kusvaarders van eenhonderd of meer bruto registerton, minstens twaalf maande in skepe wat lang of kort seereise onderneem.

(3) Diens in vissersbote, robbe- of walvisvaarders met landbasis van minder as eenhonderd bruto registerton word vir die toepassing van hierdie regulasies aanvaar as kwalifiserend vir 'n bekwaamheidsertifikaat as navigasie-offisier van 'n kusvaarder van eenhonderd of meer bruto registerton.

HOOFSTUK IV.

SLAAG OF DRUIP IN EKSAMENS.

SLAAG-PERSENTASIE.

37. Ten einde in die skriftelike gedeelte van die eksamen te slaag, moet 'n kandidaat die toepaslike persentasie behaal om te slaag in die vakke wat in onderstaande tabelle aangetoon word en hy moet ook sewentig persent van die totale punte vir alle vakke behaal. Die tyd en punte wat toegeken word vir elke skriftelike gedeelte van die eksamen vir elke graad van sertifikaat is soos volg:—

(1) Tweede Navigasie-offisier van 'n skip op vreemde vaart.

	Tyd.	Punte.	Slaag-persentasie.
Eerste dag—			
1. Algemene skeepvaartkennis.....	3 uur	200	—
2. Kaartwerk.....	2 uur	200	70%
Tweede dag—			
3. Praktiese navigasie.....	3 uur	200	70%
4. Matesis.....	2 uur	150	50%
Derde dag—			
5. Grondbeginsels van navigasie.....	2 uur	150	50%
6. Taalkennis.....	1½ uur	100	50%
	—	1,000	70%
Vierde dag of daaropvolgende dae....	Mondelinge eksamens.		

(2) Chief Navigating Officer of a Foreign-going Ship.

	Time.	Marks.	Per-centage Pass.
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	—
	—	1,000	70%

Fourth and subsequent days..... Orals.

(3) Master of a Foreign-going Ship.

	Time.	Marks.	Per-centage Pass.
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	—
	—	1,000	70%

Fourth or subsequent days..... Orals.

(4) Navigating Officer of a Coasting Ship of one hundred or more Gross Register Tons.

	Time.	Marks.	Per-centage Pass.
First Day—			
1. Chart Work.....	2 hrs.	150	70%
2. Practical Navigation.....	3 hrs.	150	70%
Second Day—			
3. Ship Knowledge.....	2 hrs.	150	50%
4. Essay in one of the Official Languages.....	1½ hrs.	100	—
	—	550	70%

Orals as convenient.

(5) Master of a Coasting Ship of one hundred or more Gross Register Tons.

	Time.	Marks.	Per-centage Pass.
First Day—			
1. Chart Work.....	2 hrs.	150	70%
2. Practical Navigation.....	2 hrs.	150	70%
Second Day—			
3. Stability.....	2 hrs.	200	50%
4. Compass Deviation.....	1½ hrs.	100	—
Third Day—			
5. Language.....	1 hr.	100	—
	—	700	70%

Orals as convenient.

PARTIAL PASS.

38. (1) A pass in either the written, oral or signals part of the examinations shall remain valid for a period of six months, and if the candidate secures a pass in all parts during this period he shall be awarded a certificate of competency. If more than six months have elapsed since the candidate passed any portion of the examination, he shall be required to take that portion again, although the Director may, in special circumstances, extend this period to one year.

(2) Candidates failing in the oral portion of the 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 shall not exceed six months and may be performed in any capacity on deck in any sea-going ship.

(2) Hoof-navigasie-offisier van 'n skip op vreemde vaart.

	Tyd.	Punte.	Slaag-persentasie.
Eerste dag—			
1. Praktiese navigasie.....	3 uur	200	70%
2. Kaartwerk.....	2 uur	150	70%
Tweede dag—			
3. Skeepsbou.....	3 uur	200	50%
4. Weerkunde.....	2 uur	100	—
Derde dag—			
5. Instandhouding van skepe.....	3 uur	200	50%
6. Magnetisme en elektrisiteit.....	2 uur	150	—
	—	1,000	70%

Vierde dag en daaropvolgende dae... Mondelinge eksamens.

(3) Gesagvoerder van 'n skip op vreemde vaart.

	Tyd.	Punte.	Slaag-persentasie.
Eerste dag—			
1. Praktiese navigasie.....	3 uur	200	70%
2. Magnetiese kompas.....	3 uur	200	50%
Tweede dag—			
3. Skeepsbou.....	3 uur	200	50%
4. Gesagvoerdersake.....	2 uur	150	50%
Derde dag—			
5. Hulpmiddels vir die ingenieurswese en radio.....	3 uur	150	—
6. Weerkunde.....	2 uur	100	—
	—	1,000	70%

Vierde dag of daaropvolgende dae... Mondelinge eksamens.

(4) Navigasie-offisier van 'n kusvaarder van een honderd of meer bruto-registerton.

	Tyd.	Punte.	Slaag-persentasie.
Eerste dag—			
1. Kaartwerk.....	2 uur	150	70%
2. Praktiese navigasie.....	3 uur	150	70%
Tweede dag—			
3. Skeepvaartkennis.....	2 uur	150	50%
4. Opstel in een van die amptelike landstale.....	1½ uur	100	—
	—	550	70%

Mondelinge eksamens indien gerieflik.

(5) Gesagvoerder van 'n kusvaarder van een-honderd of meer bruto-registerton.

	Tyd.	Punte.	Slaag-persentasie.
Eerste dag—			
1. Kaartwerk.....	2 uur	150	70%
2. Praktiese navigasie.....	2 uur	150	70%
Tweede dag—			
3. Stabiliteit.....	2 uur	200	50%
4. Kompasdeviasie.....	1½ uur	100	—
Derde dag—			
5. Taaltoets.....	1 uur	100	—
	—	700	70%

Mondelinge eksamens indien gerieflik.

SLAAG IN GEDEELTE VAN EKSAMEN.

38. (1) 'n Slaagmerk in of die skriftelike, of mondelinge of seine-gedeelte van die eksamen bly geldig vir 'n tydperk van ses maande, en indien die kandidaat 'n slaag merk behaal in al die gedeeltes van die eksamen gedurende hierdie tydperk word 'n bekwaamheidsertifikaat aan hom toegeken. Indien meer as ses maande verstryk het sedert die kandidaat in enige gedeelte van die eksamen geslaag het, moet hy daardie gedeelte van die eksamen weer aflê, maar die Direkteur kan in spesiale omstandighede hierdie tydperk tot een jaar verleng.

(2) Van kandidate wat in die mondelinge gedeelte van die eksamen vir 'n bekwaamheidsertifikaat druipe weens ernstige gebrek aan praktiese kennis kan, na die goeddunke van die eksaminator, verlang word dat hulle verdere seediens moet verrig voordat hulle 'n hereksamen ondergaan. Sodanige seediens moet vir 'n tydperk van hoogstens ses maande gedoen word en kan in enige hoedanigheid op dek in enige skip op vreemde vaart verrig word.

(3) In the case of a second failure or any subsequent failure in the written and oral portions, or both, of the examination for a certificate of competency, two months shall elapse from the date of the last failure before the candidate may be re-examined.

(4) A partial pass in an examination for a certificate of competency as a navigating officer or a master of a foreign-going ship obtained in a part of the Commonwealth other than the Union shall be accepted for the purpose of the corresponding examination in the Union, and the provisions of paragraphs (1), (2) and (3) of this regulation and of regulation 39 shall apply in respect of such partial pass.

TIME THAT MUST ELAPSE BETWEEN FAILURE IN WRITTEN PORTION OF EXAMINATION AND RE-EXAMINATION.

39. The examiner may require that a period to be determined by him in his discretion shall elapse before a candidate who has failed the written portion of the examination is re-examined; provided that the period so determined shall not exceed three months; provided, further, that a candidate who has failed shall not be re-examined in the week next after that in which he failed, unless in the opinion of the Examiner special circumstances exist.

CHAPTER V.

CONDUCT OF EXAMINATIONS.

CANDIDATES TO BE PUNCTUAL.

40. Candidates shall appear at the examination room punctually at the time appointed.

NO STRANGERS ADMITTED.

41. No persons other than those whose duties require them to be present shall be allowed in the room during examination. No instructors shall be allowed on the premises while examinations are in progress.

LOOSE PAPERS AND BOOKS.

42. Before the examination begins the tables or desks shall be cleared of all scraps of paper and books other than those permitted in the examination room in terms of these regulations.

USE OF BOOKS AND TABLES AT THE EXAMINATIONS.

43. The following tables and books may be supplied by the examiner at the examination rooms:—

Nautical tables (including logarithm tables).

Norie (full edition), Burtons.

Alt-Azimuth tables.

Davis.

Admiralty tide tables (1952).

Abridged nautical almanac.

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 shall not contain any manuscript notes. Subject to the examiner's approval, no restriction shall 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 required limits of accuracy. (See regulation 52): When tables other than those supplied by the examiner are used in answering a question, the name of the tables and a note of what is actually obtained from them shall be stated on the candidate's paper.

(3) As 'n kandidaat 'n tweede of enige daaropvolgende keer in die skriftelike en mondelinge gedeeltes, of albei, van die eksamen vir 'n bekwaamheidsertifikaat drui, moet twee maande verstryk na die datum waarop hy die vorige keer gedruip het voordat hy 'n hereksamen kan aflê.

(4) Gedeeltelike slaagpunte in 'n eksamen vir 'n bekwaamheidsertifikaat as navigasie-offisier of gesagvoerder van 'n skip op vreemde vaart wat in 'n ander deel van die Statebond as die Unie behaal is, word vir die doel van die ooreenstemmende eksamen in die Unie aanvaar, en die bepalinge van paragrawe (1), (2) en (3) van hierdie regulasie en van regulasie 39 is ten opsigte van sodanige gedeeltelike slaagpunte van toepassing.

TYD WAT MOET VERSTRYK TUSSEN DRUIP IN SKRIFTELIKE GEDEELTE VAN EKSAMEN EN HEREKSAMEN.

39. Die eksaminator mag verlang dat 'n tydperk wat hy na eie goeddunke moet bepaal, moet verstryk voordat 'n kandidaat wat in die skriftelike gedeelte van die eksamen gedruip het, 'n hereksamen mag aflê; met dien verstande dat die tydperk wat aldus bepaal word hoogstens drie maande mag wees; met dien verstande voorts dat 'n kandidaat wat gedruip het nie 'n hereksamen mag aflê in die week na dié waarin hy gedruip het nie, tensy spesiale omstandighede, na die mening van die eksaminator, dit regverdig.

HOOFSTUK V.

HOU VAN EKSAMENS.

KANDIDATE MOET STIP OP TYD WEES.

40. Kandidate moet stip op die vasgestelde tyd in die eksamenkamer aanwesig wees.

GEEN VREEMDELINGE WORD TOEGELAAT NIE.

41. Niemand word in die kamer tydens die afneem van 'n eksamen toegelaat nie behalwe diegene wat pligmatig teenwoordig mag wees. Geen instruksie word tydens die hou van 'n eksamen op die perseel toegelaat nie.

LOS VELLE PAPIER EN BOEKE.

42. Voor die aanvang van die eksamen moet alle stukkies papier en boeke, uitgesonderd dié wat ingevolge hierdie regulasies in die eksamenkamer veroorloof is, van die tafels of lessenaars verwyder word.

GEBRUIK VAN BOEKE EN TAFELS BY EKSAMENS.

43. Die eksaminator mag die volgende tafels en boeke in die eksamenkamers verskaf:—

Seevaarttafels (insluitende logaritmetafels).

Norie (volledige uitgawe), Burtons.

Altasimuttafels.

Davis.

Admiraliteitsgetytafels (1952).

"Abridged Nautical Almanac."

Kandidate wat tafels, uitgesonderd bostaande wil gebruik, kan dit in die eksamenkamer inbring, mits hulle dit voor die aanvang van die eksamen aan die eksaminator vir ondersoek en goedkeuring voorlê. Hierdie tafels mag geen handskrifte bevat nie. Onderworpe aan die goedkeuring van die eksaminator word geen beperkings geplaas op die gebruik van tafels nie, maar kandidate moet 'n begrip hê van die teorie waarop die tafels gebaseer is, en sulke tafels moet binne die vereiste perke van akkuraatheid 'n antwoord kan verskaf. (Sien regulasie 52.) Ingeval tafels, uitgesonderd dié wat deur die eksaminator verskaf is, by die beantwoording van vrae gebruik word, moet die kandidaat die naam van die tafels en wat werklik daaruit verkry is, in sy antwoordboek vermeld en aanteken.

USE OF INSTRUMENTS.

44. All instruments necessary for use in the examinations will be supplied by the examiner, but candidates may 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 shall be entered on the candidate's answer papers.

UNAUTHORISED BOOKS AND PAPERS STRICTLY FORBIDDEN.

45. Subject to the provisions of regulation 43, candidates shall not have with them any books, notes, memoranda or papers other than those supplied for use at the examination and if any candidate has brought any books, notes, memoranda or papers with him, he shall hand them to the examiner before commencing the examination.

DAMAGE TO BOOKS, INSTRUMENTS, ETC.

46. If a candidate defaces or otherwise damages any book, document or instrument supplied to him by the examiner he shall replace the damaged book, document or instrument or otherwise make good the damage.

LEAVING ROOM.

47. A candidate shall not, without the permission of the examiner, leave his seat or the examination room and if he leaves the room he shall hand to the examiner the paper on which he is engaged, and upon his return to the room shall not, without the permission of the examiner, go on with any paper or problem on which he was engaged.

SILENCE.

48. Silence shall be kept in the examination room while a written examination is in progress.

ALL WORK TO BE SHOWN.

49. (1) A candidate shall work or write only on one side of the paper and shall write his answers in a clear and legible hand, and shall sign his name at the foot of each page.

(2) A candidate shall not work out his problems on waste paper, nor write on the blotting paper supplied for his use in the examination.

(3) All work other than sketching and drawing shall be done in ink.

(4) A contravention of the provisions of this regulation may involve loss of marks.

PENALTY FOR COPYING, ETC.

50. Any candidate who refers to any unauthorised book or paper, or copies from another or affords any assistance or gives any information to another, or communicates in any way with another during the time of examination, or copies any part of the problems for the purpose of taking them out of the examination rooms, shall be regarded as having failed the examination, and shall not be accepted for re-examination for a period of six months. A candidate guilty of a second offence shall not be allowed to be examined until twelve months have elapsed after such second offence. Each offence shall be reported to the Director by the Examiner.

CANDIDATES MAY USE OWN METHOD.

51. Candidates may work out the various problems according to any method which they have been accustomed to use; provided that such method is correct in principle. Suitable recognition will be given for clear statements, reasoning and calculation in solving the problems.

GEBRUIK VAN INSTRUMENTE.

44. Alle nodige instrumente vir gebruik by die eksamens sal deur die eksaminator verskaf word, maar kandidaat word toegelaat om hulle eie tekengereedskap en rekenliniale te gebruik, mits goedkeuring van die eksaminator voor die aanvang van die eksamen verkry word. As 'n rekenliniaal gebruik word, moet die kandidaat dit in sy antwoordboek vermeld en aanteken.

ONGEMAGTIGDE BOEKE EN GESKRIFTE IS STRENG VERBODE.

45. Behoudens die bepalings van regulasie 43, mag kandidaat geen boeke, aantekeninge, memoranda of geskrifte, uitgesonderd dié wat vir gebruik by die eksamen verskaf is, by hulle hê nie, en ingeval 'n kandidaat boeke, aantekeninge, memoranda of geskrifte in sy besit het, moet hy dit voor die aanvang van die eksamen aan die eksaminator oorhandig.

SKADE AAN BOEKE, INSTRUMENTE, ENS.

46. As 'n kandidaat 'n boek, dokument of instrument wat deur die eksaminator aan hom verskaf is, skend of andersins beskadig, moet hy die beskadigde boek, dokument of instrument vervang of andersins die skade herstel.

UITGAAN UIT KAMER.

47. Geen kandidaat mag sonder toestemming van die eksaminator sy sitplek of die kamer verlaat nie, en as hy die kamer verlaat, moet hy die antwoordboek en vraestel waarmee hy besig is aan die eksaminator oorhandig en as hy na die kamer terugkom, mag hy nie sonder toestemming van die eksaminator met die vraestel of opgaaf waarmee hy besig was, aangaan nie.

STILTE.

48. Terwyl 'n skriftelike eksamen afgeneem word, moet daar stilte in die eksamenkamer bewaar word.

WERK MOET VERTOON WORD.

49. (1) 'n Kandidaat mag slegs op een kant van die antwoordboek werk of skryf en moet sy antwoorde duidelik en leesbaar skryf en sy naam onderaan elke bladsy teken.

(2) 'n kandidaat mag nie sy opgawes op skeurpapier uitwerk nie, of op vloeipapier wat vir sy gebruik by die eksamen verskaf word, skryf nie.

(3) Alle werk, uitgesonderd skets- en tekenwerk, moet met ink gedoen word.

(4) 'n Oortreding van die bepalings van hierdie regulasie kan die verlies van punte tot gevolg hê.

STRAF VIR AFSKRYF, ENS.

50. As 'n kandidaat 'n ongemagtigde boek of geskrif raadpleeg, of van 'n ander kandidaat afskryf of aan iemand anders hulp verleen of inligting verstrek, of tydens die eksamen enigerwyse met iemand in verbinding tree, of enige deel van die opgawes afskryf met die doel om dit uit die eksamenkamer te verwyder, word daar beskou dat hy in die eksamen gedruip het, en hy mag vir 'n tydperk van ses maande nie 'n hereksamen aflê nie. 'n Kandidaat wat hom aan 'n tweede oortreding skuldig maak, mag nie voor na verloop van twaalf maande na sodanige tweede oortreding, eksamen aflê nie. Die eksaminator moet van elke oortreding aan die Direkteur verslag doen.

KANDIDATE MAG EIE METODE GEBRUIK.

51. Kandidate mag die verskillende opgawes volgens hul eie gebruiklike metode uitwerk, mits sodanige metode in beginsel korrek is. Duidelike uiteensettings, berekening in die oplossing van opgawes sal paslike erkenning ontvang.

DEGREE OF PRECISION REQUIRED.

52. (1) 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.

(2) The method of calculation used in obtaining a position line must be capable of giving any answer within 0.5 of a mile.

(3) In calculation of compass errors, bearings and courses, the answer shall be worked out to within 0.25 of a degree, but in chart work 0.5 of a degree is sufficient.

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

CORRECTION BY TABLES.

53. In the Principles of Navigation Paper for Second Navigating Officer of a foreign-going ship, the correction of altitudes by total correction tables shall not be allowed. Every correction must appear on the papers of the candidate.

COMPASS DEVIATION.

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

SEXTANT.

55. Examination in the sextant shall be conducted orally and practically for all grades of certificates of competency. Candidates shall be required to measure both vertical and horizontal angles, and shall be examined practically as to their knowledge of the adjustments and the use of the various screws; they shall be required 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.

56. (1) In examination on the collision regulations, the candidate shall satisfy the examiner that he grasps the full significance, content and practical application of those regulations.

(2) Mere ability on the part of the candidate to repeat the regulations word for word shall not be sufficient to ensure his passing the examination.

(NOTE.—The International Regulations for Preventing Collisions at Sea, 1948, appear in Annexure C to these regulations.)

NON-ATTENDANCE AT ORAL EXAMINATIONS.

57. (1) Candidates for any grade of certificate shall proceed to the oral examination whether or not they have passed in the written portion.

(2) A candidate who does not proceed to the oral examination at the time appointed shall be regarded as having failed in both the written and oral portions of the examination, unless he produces a medical certificate or other satisfactory evidence of his inability to attend.

EXAMINATION IN SIGNALLING.

58. (1) 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 certificates of competency are held within the six months immediately before and after he presents himself for examination in the written and oral portions.

(2) If the part of the examination which relates to signalling is taken separately, the special fee prescribed by regulation 62 shall be paid for each attempt.

VERLANGDE GRAAD VAN JUISTHEID.

52. (1) By die berekening vir die vasstelling van die posisie van die skip word van kandidate verwag om dit tot 0.2 boogminuut en tot die naaste sekonde van tyd te bepaal.

(2) Die metode van berekening wat gebruik word by die vasstelling van 'n standlyn moet enige antwoord tot binne 0.5 van 'n myl kan aandui.

(3) By die berekening van kompasfoute, peilings en koerse, moet die antwoord dit tot binne 0.25 van 'n graad aandui, maar in kaartwerk is 0.5 van 'n graad voldoende.

(4) By die berekening van dieptepeilingkorreksies, is dit voldoende as die antwoord van die kandidaat binne 'n half voet van 'n juiste uitslag is.

KORREKSIES VOLGENS TAFELS.

53. In die vraestel oor die Grondbeginsels van Navigasie vir tweede navigasie-offisier van 'n skip op vreemde vaart, word die korreksie van hoogtes volgens totale korreksietafels nie toegelaat nie. Elke korreksie moet in die kandidaat se antwoordboeke vermeld en aangeteken word.

KOMPAS-DEVIASIE.

54. By die beantwoording van vrae oor die tentatiewe metode van kompas instel kan die kandidaat volgens Beall se Kompas-deviaskoop getoets word.

SEXTANT.

55. Vir alle grade van bekwaamheidsertifikate moet eksamens in die sextant mondelings en prakties afgeneem word. Kandidate moet in staat wees om vertikale asook horisontale hoeke te meet en word prakties geëksamineer aangaande hulle kennis van die instel en gebruik van die verskillende groewe; hulle moet juiste aflesings op en van die boog kan maak en die indeksfout deur die kim asook deur die son kan vasstel.

PADVERKEERSREËL.

56. (1) by die afleë van 'n eksamen aangaande die regulasies in verband met botsings, moet die kandidaat die eksaminator oortuig dat hy die betekenis, inhoud en praktiese toepassing van daardie regulasies ten volle begryp.

(2) Bekwaamheid om die regulasies slegs woordeliks te herhaal, word nie as voldoende geag om die kandidaat in 'n eksamen te laat slaag nie.

(LET WEL.—Die Internasionale Regulasies vir die voorkoming van botsings op see, 1948, verskyn in Aanhangsel C aan hierdie regulasies.)

AFWESIGHEID BY MONDELINGE EKSAMENS.

57. (1) Kandidate vir enige graad van sertifikaat moet met die mondelinge gedeelte van die eksamen voortgaan hetsy hulle in die skriftelike gedeelte geslaag het al dan nie.

(2) As 'n kandidaat nie op die vasgestelde tyd by die mondelinge eksamen opdaag nie, word geag dat hy in beide die geskrewe en mondelinge gedeelte van die eksamen gedruip het, tensy hy 'n mediese sertifikaat of ander bevredigende bewys lewer van sy onvermoë om die eksamen af te lê.

EKSAMEN IN SEINE.

58. (1) 'n Kandidaat wat hom deur diens ter see benoembaar gemaak het vir 'n eksamen vir enige graad van sertifikaat waarin seine benodig word, mag hierdie gedeelte van die eksamen afleë gedurende enige week waarin eksamens vir bekwaamheidsertifikate gehou word binne die ses maande onmiddellik voor en nadat hy homself vir eksamen in die skriftelike en mondelinge gedeeltes aangemeld het.

(2) Indien die gedeelte van die eksamen wat op seine betrekking het afsonderlik afgeleë word, moet die spesiale eksamengelde wat by regulasie 62 voorgeskryf word vir elke poging betaal word.

PENALTY FOR BREACH OF REGULATIONS.

59. If a candidate contravenes any of the regulations other than a regulation for the contravention of which another penalty is by these regulations prescribed, or is insolent to an examiner, or conducts himself in a disorderly or improper manner in or about the examination room, the examiner may treat him as having failed the examination, and if he is so treated he shall not be accepted for re-examination for a period of three months.

CHAPTER VI.

EXAMINATION FEES.

WHEN TO PAY FEES.

60. A candidate for examination for a certificate of competency shall pay the examination fee prior to the date of the examination and no candidate shall be allowed to sit for the examination unless he produces to the examiner the receipt for the fees paid.

WHERE TO PAY FEES.

61. The fee for examination shall be paid to the proper officer who shall issue a receipt stating—

- (a) the name of the candidate;
- (b) the amount paid; and
- (c) the grade of the examination.

TABLE OF FEES.

62. The fees payable for examination shall be as follows:—

	£	s.	d.
Second Navigating Officer of a foreign-going ship	1	0	0
Chief Navigating Officer of a foreign-going ship	1	0	0
Master of a foreign-going ship	2	0	0
Navigating Officer of a coasting ship of one hundred or more gross register tons ...	0	10	0
Master of a coasting ship of one hundred or more gross register tons	1	0	0

The above fees include the fee for the examination in signalling, if taken at the same time as the rest of the examination.

If a candidate is re-examined only in the written or in the oral part of the examination, one half of the above fees shall be charged, which shall cover also an examination in signalling if taken at the same time.

Where a candidate takes the examination in signalling separately from one or both of the remaining parts of the examination, a special fee of 10s. shall be charged for each attempt.

REFUND OF FEES.

63. (1) If through circumstances beyond the control of a candidate he is unable to undergo the examination for which fees have been paid, he may apply, in writing, to the proper officer for a refund of such fees. If the proper officer considers that the application is based upon reasonable grounds, he shall transmit it to the Director, who may authorise the refund.

(2) If a candidate is, in terms of regulation 10, not allowed to complete an examination, he may apply, in writing, to the proper officer for a refund of the fees paid by him, and such fees shall be refunded to him.

STRAF VIR OORTREDING VAN REGULASIES.

59. Ingeval 'n kandidaat enigeen van hierdie regulasies oortree, uitgesonderd 'n regulasie vir die oortreding waarvan 'n ander straf by hierdie regulasies bepaal word, of brutaal teenoor die eksaminator is, of homself wanordelik of onbehoorlik in of by 'n eksamenkamer gedra, kan die eksaminator hom afwys asof hy in die eksamen gedruip het, en as hy so afgewys word, mag hy vir 'n tydperk van drie maande nie toegelaat word om opnuut eksamen te doen nie.

HOOFSTUK VI.

EKSAMENGELDE.

WANNEER BETAALBAAR.

60. 'n Kandidaat wat 'n eksamen vir 'n bekwaamheid-sertifikaat wil aflê, moet die eksamengelde voor die datum van die eksamen betaal, en geen kandidaat word tot die eksamen toegelaat nie tensy hy aan die eksaminator 'n kwitansie vir die eksamengelde vertoon.

WAAR BETAALBAAR.

61. Die eksamengelde moet aan die bevoegde beamppte betaal word, wat 'n kwitansie moet uitreik met vermelding van—

- (a) die naam van die kandidaat;
- (b) die bedrag wat betaal is; en
- (c) die graad van die eksamen.

TABEL VAN EKSAMENGELDE.

62. Ondervermelde gelde moet vir die eksamens betaal word:—

	£	s.	d.
Tweede navigasie-offisier van 'n skip op vreemde vaart	1	0	0
Hoof-navigasie-offisier van 'n skip op vreemde vaart	1	0	0
Gesagvoerder van 'n skip op vreemde vaart	2	0	0
Navigasie-offisier van 'n kusvaarder van eenhonderd of meer bruto registerton ...	0	10	0
Gesagvoerder van 'n kusvaarder van eenhonderd of meer bruto registerton	1	0	0

Bostaande gelde is met insluiting van die eksamengelde vir seinwerk as dit tegelykertyd met die res van die eksamen afgelê word.

As 'n kandidaat slegs in die skriftelike of mondelinge deel van die eksamen opnuut geëksamineer word, moet een helfte van bovermelde gelde betaal word, wat ook 'n eksamen in seinwerk dek, as dit terselfdertyd afgelê word.

As 'n kandidaat die eksamen in seinwerk afsonderlik van een of van albei van die oorblywende gedeeltes van die eksamen aflê, moet 'n spesiale bedrag van 10s. vir elke poging betaal word.

TERUGBETALING VAN EKSAMENGELDE.

63. (1) As 'n kandidaat deur omstandighede buite sy beheer nie in staat is om 'n eksamen waarvoor hy gelde betaal het, af te lê nie, kan hy skriftelik by die bevoegde beamppte aansoek doen om terugbetaling van die gelde. As die bevoegde beamppte van mening is dat die aansoek op redelike gronde berus, moet hy dit aan die Direkteur deurstuur, wat die terugbetaling kan magtig.

(2) As 'n kandidaat, ingevolge regulasie 10 nie toegelaat word om die eksamen te voltooi nie, kan hy skriftelik by die bevoegde beamppte aansoek doen om terugbetaling van die gelde wat hy betaal het, en die gelde word dan aan hom terugbetaal.

(3) If a candidate who has paid the fees prescribed by regulation 61 for an examination for a certificate of competency fails to pass the colour and form vision tests, he may apply, in writing, to the proper officer for a refund of the fees so paid, and such fees shall be refunded to him.

(4) Subject to the provisions of this regulation, if a candidate fails to pass any part of the examination other than the colour and form vision tests, no part of the fee shall be refunded to him.

CHAPTER VII.

ISSUE OF CERTIFICATES.

AUTHORITY FOR DELIVERY OF A CERTIFICATE OF COMPETENCY.

64. A candidate who passes the examination shall receive from the examiner a form M.6 set forth in Annexure A, duly completed, authorising the person to whom it is addressed to issue the certificate. A candidate who is partially successful or unsuccessful in the examination, shall receive from the examiner a form M.7 set forth in Annexure A, duly completed, which must be retained and produced to the examiner when he next presents himself for examination.

ISSUE OF CERTIFICATE OF COMPETENCY AS NAVIGATING OFFICER OR MASTER.

65. If a candidate for a certificate of competency provided for by these regulations has gained the experience and performed the sea service required thereby and has passed the prescribed examination, the certificate shall, subject to the provisions of these regulations, be issued to him; provided that if in terms of these regulations, it is necessary for the candidate to hold any certificate of competency or service in order that he may be qualified to sit for the examination, he surrenders the last mentioned certificate to the examiner.

(NOTE.—Attention is invited to the note appended to regulation 12.)

CHAPTER VIII.

CERTIFICATES OF SERVICE.

HOW APPLICATION SHOULD BE MADE.

66. An applicant for a certificate of service in terms of section *eighty* of the Act shall complete the form of application M.5 set forth in Annexure A, giving the necessary particulars, and shall hand or post it to the proper officer. The proper officer shall forward the application to the Director.

CHAPTER IX.

SYLLABUSES.

GENERAL.

67. (1) The syllabuses for the various examinations referred to in regulations 17 to 21 shall be as set forth in Annexure D.

(2) In each paper throughout the syllabuses, questions may be set combining one or more paragraphs.

(3) The syllabus for a higher grade in both written and orals shall be regarded as including the syllabus of that subject (if any) for certificates of lower grades.

(3) As 'n kandidaat wat die gelde soos by regulasie 61 voorgeskryf vir 'n eksamen vir 'n bekwaamheidsertifikaat betaal het, nie in die gesigstoetse vir kleur en vorm slaag nie, kan hy skriftelik by die bevoegde beampte aansoek doen om terugbetaling van die gelde wat hy betaal het, en die gelde word dan aan hom terugbetaal.

(4) As 'n kandidaat nie in enige gedeelte van die eksamen, uitgesonderd die gesigstoetse vir kleur en vorm, slaag nie, word, behoudens die bepalings van hierdie regulasie, geen deel van die gelde aan hom terugbetaal nie.

HOOFSTUK VII.

UITREIKING VAN SERTIFIKATE.

MAGTIGANG VIR LEWERING VAN BEKWAAMHEIDSERTIFIKAAT.

64. 'n Kandidaat wat in die eksamen slaag, ontvang van die eksaminator 'n vorm M. 6, soos in Aanhangel A uiteengesit, behoorlik voltooi, waarby die persoon aan wie dit geadresseer is, gemagtig word om die sertifikaat aan die kandidaat te lewer. 'n Kandidaat wat gedeeltelik in die eksamen geslaag of gedruip het, ontvang van die eksaminator 'n vorm M. 7, soos in Aanhangel A uiteengesit, behoorlik voltooi, wat die kandidaat moet behou en, wanneer hy weer eksamen kom aflê, aan die eksaminator moet vertoon.

UITREIKING VAN BEKWAAMHEIDSERTIFIKAAT AS NAVIGASIE-OFFISIER OF GESAGVOERDER.

65. As 'n kandidaat vir 'n bekwaamheidsertifikaat soos by hierdie regulasies voorgeskryf, die vereiste ondervinding opgedoen en die seediens verrig het, en in die voorgeskrewe eksamen slaag, word die sertifikaat, behoudens die bepalings van hierdie regulasies, aan hom uitgereik; met dien verstande dat, ingeval die kandidaat, ingevolge hierdie regulasies, in besit moet wees van 'n bekwaamheid- of dienssertifikaat ten einde hom vir die aflê van die eksamen te kwalifiseer, hy laasgenoemde sertifikaat aan die eksaminator moet afgee.

(LET WEL.—Die aandag word gevestig op die voetnoot van regulasie 12.)

HOOFSTUK VIII.

DIENSSERTIFIKATE.

HOE AANSOEK GEDOEN MOET WORD.

66. 'n Applikant vir 'n dienssertifikaat, ingevolge artikel *tagtig* van die Wet, moet die aansoekvorm M. 5, soos in Aanhangel A uiteengesit, voltooi, met vermelding van die nodige besonderhede, en dit aan die bevoegde beampte oorhandig of dit aan hom pos. Die bevoegde beampte stuur dan die aansoek aan die Direkteur.

HOOFSTUK IX.

LEERPLANNE.

ALGEMEEN.

67. (1) Die leerplanne vir die verskillende eksamens waarvan in regulasies 17 tot 21 melding gemaak word, is soos in Aanhangel C uiteengesit.

(2) In elke vraestel in die leerplanne kan daar deurgaans vrae gestel word waarin een of meer paragrawe saamgevat word.

(3) Daar word beskou dat die leerplan vir 'n hoër graad in sowel die skriftelike as mondelinge eksamens die leerplan van daardie vak (indien enige) vir sertifikate van laer graad insluit.

ANNEXURE A.

LIST OF FORMS APPEARING IN THESE REGULATIONS.

Regulation 6.	Application to be examined for a Certificate of Competency as.....	M. 1
Regulation 13.	Application for a certified copy of a Certificate of Competency or Qualification or Certificate of Service....	M. 3
Regulation 15.	Application to be examined in the Colour and Form Vision Tests.....	M. 4
Regulation 26.	Certificates of Watch-keeping Service.....	M. 8
Regulation 64.	Authority for delivery of a Certificate of Competency or Qualification.....	M. 6
Regulation 64.	Results of Examination.....	M. 7
Regulation 66.	Application for a Certificate of Service.....	M. 5

M. 1.

UNION OF SOUTH AFRICA.

DEPARTMENT OF CUSTOMS AND EXCISE.

MARINE SECTION.

APPLICATION TO BE EXAMINED FOR A CERTIFICATE OF COMPETENCY AS.....

*(State here grade of certificate required.)

Rotation No.

A.—Name, etc., of Candidate.

Port of

(1) Christian Names (in full).	(2) Surname.	(3) Permanent Address, stating Town, Street, House No. and Name of Person with whom Residing.

Date of Birth.			Place of Birth.	(8) Nationality.
(4) Day.	(5) Month.	(6) Year.	(7) Town and Country.	(If a Citizen by Registration or Naturalisation, state Number of Certificate.)

B.—Particulars of all previous certificates (if any) whether issued in the Union of South Africa or elsewhere.

(9) No.	(10) Competency or Service.	(11) Grade: Foreign-going, Coasting, Fishing, Other.	(12) Where Issued.	(13) Date of Passing.	(14) If at any Time Suspended or Cancelled, state by what Court or Authority.	(15) Date.	(16) Cause.

C.—Certificate now required.

(17) Grade: Foreign-going, Coasting, Fishing, Other.	(18) Port at which Candidate wishes to be Examined.	(19) Office to which it is to be sent.

* This form is for use when the certificate required is one of the following grades:—

Master, Chief or Second Navigating Officer of a foreign-going ship.

Master or Navigating Officer of a coasting ship of one hundred or more gross register tons.

Skipper, Mate or Boatswain of a fishing, sealing or shore-based whaling boat of one hundred or more gross register tons.

Skipper or Mate of a coasting ship, or a fishing, sealing or shore-based whaling boat of less than one hundred gross register tons.

AANHANGSEL A.

LYS VAN VORMS WAT IN HIERDIE REGULASIES VOORKOM.

Regulasie 6.	Aansoek om geëksamineer te word vir 'n bekwaamheidsertifikaat as.....	M. 1
Regulasie 13.	Aansoek om 'n gesertifiseerde afskrif van 'n bekwaamheidsertifikaat, bevoegdheidsertifikaat of dienssertifikaat.....	M. 3
Regulasie 15.	Aansoek om in die gesigstoetse vir kleur en vorm ondersoek te word.....	M. 4
Regulasie 26.	Waghoudienssertifikaat.....	M. 8
Regulasie 64.	Magtiging vir aflewering van bekwaamheidsertifikaat of bevoegdheidsertifikaat.....	M. 6
Regulasie 64.	Uitslag van eksamen.....	M. 7
Regulasie 66.	Aansoek om 'n dienssertifikaat.....	M. 5

UNIE VAN SUID-AFRIKA.

M. 1.

DEPARTEMENT VAN DOEANE EN AKSYNS.

MARINE-AFDELING.

AANSOEK OM ONDERSOEK TE WORD VIR 'N BEKWAAMHEIDSSERTIFIKAAT AS.....

†(Meld hier graad van sertifikaat verlang.)

Volgnommer.....

A.—Naam, ens., van kandidaat.

Hawe.....

(1) Voorname (voluit).	(2) Familienaam.	(3) Permanente adres, noem stad, straat, huisno. en naam van persoon by wie woonagtig.

Datum van geboorte.			Geboorteplek.	(8) Nasionaliteit.
(4) Dag.	(5) Maand.	(6) Jaar.	(7) Stad en land.	(Indien 'n burger as gevolg van registrasie of naturalisasie, meld nommer van sertifikaat.)

B.—Besonderhede van alle vorige sertifikate of in die Unie van Suid-Afrika of elders uitgereik.

(9) No.	(10) Bekwaamheid of diens.	(11) Graad: Skip op vreemde vaart, kusvaarder, vissersbote, ander.	(12) Waar uitgereik.	(13) Datum waarop geslaag.	(14) Indien te eniger tyd geskors of geskrap, vermeld deur watter hof of gesag.	(15) Datum.	(16) Oorsaak.

C.—Sertifikaat wat nou verlang word.

(17) Graad: Skip op vreemde vaart, kusvaarder, vissersbote, ander.	(18) Hawe waar kandidaat ondersoek wil word.	(19) Kantoor waarna dit gestuur moet word.

† Hierdie vorm word gebruik indien die sertifikaat wat verlang word een van die volgende grade is:—

Gesagvoerder, Hoof- of Tweede Navigasie-offisier van 'n skip op vreemde vaart.

Gesagvoerder of Navigasie-offisier van 'n kusvaarder van eenhonderd of meer bruto-registerton.

Skipper, Stuurman of Bootsman van 'n vissersboot, robbevaarder of walvisvaarder met landbasis van eenhonderd of meer bruto-registerton.

Skipper of Stuurman van 'n kusvaarder, vissersboot, robbevaarder of walvisvaarder met landbasis van minder as eenhonderd bruto-registerton.

D.—If the candidate has previously been examined for the certificate now required, or in the colour and form vision tests, he must here give particulars of the last occasion on which he was examined, stating when, where, and with which result. If he has not been examined for a certificate or in the colour and form vision tests, he must state so in writing across this division. A candidate not possessing a certificate of competency who has at any time failed in the colour and form vision tests, must here state when and where.

(20) Day.	(21) Month.	(22) Year.	(23) Port.	Subject in which Examined and Result.			
				(24) Colour and Form Vision Tests.	(25) Written.	(26) Oral.	(27) Signals.

E.—Certificate of Examiner.

Date and Place of Examination.		(30)	(31)	(32)	(33)	(34)	(35)	(36)
(28) Date.	(29) Place.	Letter Test.	Lantern Test.	Written.	Oral.	Signals.	If failed in Oral state how much further Sea Service (if any) must be Performed.	Remarks (e.g. certificate for which Passed, Eligibility for next Examination, etc.).
		*	*	*	*	*		

* Insert "Passed", "Failed", or "Not Examined", in each column. In colour vision, if candidate already holds a certificate of competency, state "Not Examined".

F.—Personal description of candidate.

Height.		Colour of—		(41)	(42)
(37) Feet.	(38) Inches.	(39) Eyes.	(40) Hair.	Race. (State whether European, Coloured, Native or Indian. If other, specify).	Personal Marks or Peculiarities (if any).

I hereby certify that the particulars contained in Division E and F are correct, and that the candidate has produced satisfactory testimonials and proof of service.

At the port of _____ this _____ day of _____ 19 _____

Examiner.

The Director of Merchant Shipping, Pretoria.

G.—Complete list of testimonials and statement of service from first going to sea, or from date of present certificate.

The testimonials, which must be attached hereto, are to be numbered consecutively by the candidate and the corresponding numbers entered by him in Column (43) below.

(43) No. of Testimonials (if any).	Particulars of Ship.			
	(44) Name of Ship.	(45) Steam, Motor, Other.	(46) Tonnage.	(47) Port of Registry and Official No. of Ship.

Particulars of Applicant's Service.

(48) Capacity.	(49) Date of Commence- ment.	(50) Date of Termination.	Length of Service.			(54) Trade in which Employed.	(55) Remarks.	(56) Initials of Verifier.
			(51) Years.	(52) Months.	(53) Days.			
Total service at sea.....								
Time served for which official proof is produced.....								
Time served for which no proof is pro- duced.....								

D.—Indien die kandidaat by 'n vorige geleentheid vir die sertifikaat wat nou verlang word of in die gesigstoetse vir kleur en vorm ondersoek was, moet hy hier besonderhede van die jongste geleentheid gee wanneer hy ondersoek was en meld wanneer, waar en met watter uitslag. Indien hy nie vir 'n sertifikaat of in die gesigstoetse vir kleur en vorm ondersoek was nie moet hy dit by wyse van 'n aantekening in hierdie afdeling meld. 'n Kandidaat wat nie in besit van 'n bekwaamheidsertifikaat is nie en wat te eniger tyd in die gesigstoetse vir kleur en vorm gedruip het, moet hier meld wanneer en waar.

(20) Dag.	(21) Maand.	(22) Jaar.	(23) Hawe.	Onderwerp waarin hy ondersoek is en uitslag.			
				(24) Gesigstoetse vir kleur en vorm.	(25) Skriftelik.	(26) Mondelings.	(27) Seine.

E.—Sertifikaat van eksaminator.

Datum en plek van eksamen.		(30)	(31)	(32)	(33)	(34)	(35)	(36)
(28) Datum.	(29) Plek.	Lettertoets. *	Lanterntoets. *	Skriftelik. *	Mondelings. *	Seine. *	Indien in mondelings gedruip meld watter verder seediens (indien enige) gedoen moet word.	Opmerkings (bv. sertifikaat wat verkry sal word, wanneer toelaatbaar vir vol- gende eksamen, ens.).

* Voeg in „Geslaag”, „Gedruip” of „Nie ondersoek nie” na gelang van die geval. In die kleurgestig, indien die kandidaat al 'n bekwaamheidsertifikaat besit, meld „Nie ondersoek nie”.

F.—Persoonlike beskrywing van kandidaat.

Lengte.		Kleur van—		(41) Ras. (Meld of Blanke, Kleurling, Naturel of Indiër. Indien ander, spesifiseer.)	(42) Persoonlike merke of eienaardighede (indien enige).
(37) Voet.	(38) Duim.	(39) Oë.	(40) Hare.		

Hierby sertifiseer ek dat die besonderhede vervat in Afdelings E en F korrek is, en dat die kandidaat bevredigende getuigskrifte en bewys van diens voorgelê het.

By die hawe van _____ die _____ dag van _____ 19 _____

Eksaminator.

Die Direkteur van Handelskeepvaart, Pretoria.

G.—Volledige lys van getuigskrifte en verklaring van diens vanaf eerste maal dat hy na see gegaan het, of vanaf datum van teenswoordige sertifikaat.

Die getuigskrifte, wat hieraan geheg moet word, moet in volgorde *deur die kandidaat* genommer en die ooreenstemmende nommers moet *deur hom* in Kolom (43) hieronder ingeskryf word.

(43) Getal getuigskrifte (indien enige).	Besonderhede van skip.			
	(44) Naam van skip.	(45) Stoom, motor, ander.	(46) Tonnemaat.	(47) Registrasiehawe en amptelike nommer van skip.

Besonderhede van applikant se diens.

(48) Hoedanig- heid.	(49) Datum van aanvang.	(50) Datum van beëindiging.	Tydperk van diens.			(54) Handel waarin werksaam.	(55) Opmerkings.	(56) Voorletters van nasiener.
			(51) Jare.	(52) Maande.	(53) Dae.			
Totale seediens.....								
Dienstyd waarvoor amptelike bewys voor- gelê word.....								
Dienstermyn waarvoor geen bewys voor- gelê word nie.....								

H.—Declaration to be made by candidate.

N.B.—The candidate's attention should here be drawn to the fact that any false representation is punishable under section *three hundred and fifteen* of Act No. 57 of 1951.

I do hereby declare that the particulars contained in Divisions A, B, C, D and G of this form, are correct and true to the best of my knowledge and belief: and I make this declaration conscientiously believing it to be true.

Dated at _____ this _____ day of _____ 19 _____

Signature of Candidate.

Declared before me at _____

and the fee of _____ Receipt No. _____

received this _____ day of _____ 19 _____

Signature and Designation of Proper Officer or
Commissioner of Oaths.

M. 3.

UNION OF SOUTH AFRICA.

DEPARTMENT OF CUSTOMS AND EXCISE.

MARINE SECTION.

APPLICATION FOR CERTIFIED COPY OF A CERTIFICATE OF COMPETENCY OR QUALIFICATION OR A CERTIFICATE OF SERVICE.

No. of lost certificate.

Grade of lost certificate.

Port of _____

DIVISION A.—NAME, ETC., OF APPLICANT.

Name. (1)	Address. (2)

Date of Birth. (3)	Place of Birth. (4)

DIVISION B.—PARTICULARS OF LAST SERVICE.

Name of Last Ship. (5)	Port of Registry and Official No. of Last Ship. (6)	Rank or Rating on Board Last Ship. (7)	Description of Last Voyage.			
			From. (8)	To. (9)	Commenced. (10)	Ended. (11)

Particulars of vessels in which applicant has served before and after the issue to him of the certificate now lost.

H.—Verklaring wat deur die kandidaat afgelê moet word.

L.W.—Die aandag van die kandidaat moet op die feit gevestig word dat enige wanvoorstellings strafbaar is ingevolge artikel drie honderd-en-veftien van Wet No. 57 van 1951.

Ek verklaar hiermee dat die besonderhede wat in Afdelings A, B, C, D en G van hierdie vorm aangegee word na my beste wete en oortuiging juis en waar is: en ek verklaar volgens my gewete en oortuiging dat dit waar is.

Gedateer te _____ op die _____ dag van _____ 19 _____

Handtekening van kandidaat.

Verklaar voor my te _____
en die bedrag van _____ Bewys No. _____
ontvang op die _____ dag van _____ 19 _____

Handtekening en ampstittel van bevoegde beampste of
Kommissaris van Ede.

M. 3.

UNIE VAN SUID-AFRIKA.

DEPARTEMENT VAN DOEANE EN AKSYNS.

MARINE-AFDELING.

AANSOEK OM 'N GESERTIFISEERDE AFSCRIF VAN 'N BEKWAAMHEID- OF BEVOEGDHEIDSERTIFIKAAT OF DIENS-
SERTIFIKAAT.

No. van verlore sertifikaat.

Graad van verlore sertifikaat.

Hawe van _____

AFDELING A.—NAAM, ENS., VAN APPLIKANT.

Naam. (1)	Adres. (2)

Datum van geboorte. (3)	Geboorteplek. (4)

AFDELING B.—BESONDERHEDE VAN LAASTE DIENS.

Naam van laaste skip. (5)	Registrasiehawe en amptelike No. van laaste skip. (6)	Rang of gradering aan boord laaste skip. (7)	Beskrywing van laaste seereis.			
			Van. (8)	Na. (9)	Begin. (10)	Beëindig. (11)

Besonderhede aangaande vaartuie waarop applikant diens gedoen het voor en na die uitreiking aan hom van die sertifikaat wat verlore is.

Name of Ship. (12)	Port of Registry and Official No. (13)	Rank or Rating on Board Ship. (14)	Whether in Foreign or Coasting Trade, or in Fishing. (15)	Service.	
				Commenced. (16)	Ended. (17)

DIVISION C.—DESTINATION OF CERTIFICATE.
(To be completed by applicant.)

I request that the certified copy of my certificate may be delivered to me at _____

Signature of Applicant.

DIVISION D.—DECLARATION TO BE MADE BY APPLICANT BEFORE THE PROPER OFFICER.

I, _____ of _____

DO HEREBY DECLARE—

(1) that my certificate was a certificate of* _____
as _____
and that it was numbered _____

(2) that the said certificate was lost or destroyed under the following circumstances:—

† _____

(3) that the statements made herein and in Divisions A and B on the reverse side hereof are correct and true to the best of my knowledge and belief.

Signature of Applicant.

DECLARED BEFORE ME AT _____

and the renewal fee of _____ Receipt No. _____
received this _____ day of _____ 19 _____

Signature and Designation of Proper Officer.

* Insert the word Competency, Qualification or Service and Grade.
† Here state the place, date and cause of the loss of the certificate.

The Director of Merchant Shipping,
Pretoria.

M. 4.

UNION OF SOUTH AFRICA.
DEPARTMENT OF CUSTOMS AND EXCISE.
MARINE SECTION.

Rotation No. _____

Port _____

APPLICATION TO BE EXAMINED IN THE COLOUR AND FORM VISION TESTS.

Name and Description of Candidate.

Surname (in Block Letters).	Christian Names (in Block Letters).	Date of Birth.	Birth- place.	Rating.	Height.		Colour of.		Personal Marks or Peculiarities.	Race.
					Feet.	Inches.	Eyes.	Hair.		

Naam van skip.	Registrasiehawe en amptelike No.	Rang of gradering aan boord skip.	Indien in vreemde of kushandel, of in die vissersbedryf.	Diens:	
				Begin.	Beëindig.
(12)	(13)	(14)	(15)	(16)	(17)

AFDELING C.—BESTEMMING VAN SERTIFIKAAT.

(Moet deur die applikant voltooi word.)

Ek versoek dat die gesertifiseerde afskrif van my sertifikaat aan my afgelewer word by _____

_____ Handtekening van applikant.

AFDELING D.—VERKLARING WAT GEMAAK MOET WORD DEUR DIE APPLIKANT VOOR DIE BEVOEGDE BEAMPTTE.

Ek, _____ van _____

VERKLAAR HIERMEE—

(1) dat my sertifikaat 'n sertifikaat was van* _____ as _____

en dat dit genommer was _____

(2) dat genoemde sertifikaat onder die volgende omstandighede verlore of vernietig is:—

† _____

(3) dat die verklarings wat hierin en in Afdelings A en B op die keersy hiervan gemaak is na my beste wete en oortuiging korrek en waar is.

_____ Handtekening van applikant.

VERKLAAR VOOR MY TE

en die hernuwingsgelde van _____ Bewys No. _____

ontvang die _____ dag van _____ 19 _____

_____ Handtekening en amptitel van bevoegde beampte.

* Voeg in die woord Bekwaamheid, Bevoegdheid, of Diens en Graad.

† Meld hier die plek, datum en oorsaak van die verlies van die sertifikaat.

Die Direkteur van Handelskeepvaart,
Pretoria.

M. 4.

UNIE VAN SUID-AFRIKA.

DEPARTEMENT VAN DOEANE EN AKSYNS.

MARINE-AFDELING.

Volgnommer.

Hawe _____

AANSOEK OM IN DIE GESIGSTOETSE VIR KLEUR EN VORM ONDERSOEK TE WORD.

Name en beskrywing van kandidaat.

Familienaam (in drukletters).	Voorname (in drukletters).	Datum van geboorte.	Geboorte-plek.	Gradering.	Lengte.		Kleur van.		Persoonlike merke of eienaardighede.	Ras.
					Voet.	Duim.	Oë.	Hare.		

If Candidate has Served at Sea, state—				If Candidate has not Served at Sea, state—	
Number of Years and Capacity in which Served.		Grades of Certificates of Competency and Dates on which Granted.		If about to go to Sea.	In what Capacity.
Years.	Capacity.	Grade.	Date.		

RESULT OF ANY PREVIOUS COLOUR AND FORM VISION TESTS.

NOTE.—If candidate has been previously examined in the colour and form vision tests he must state here when and where the last examination took place, and insert "Passed", "Failed", "Not examined", as the case may be, against each subject. If the candidate holds a certificate of competency he should not be examined in the Lantern test, and the entry "Not examined" should be made against the subject.

Day.	Month.	Year.	Port.	Letter Test.	Lantern Test.	State whether result is in respect of— (a) First failure. (b) Failed by Director. (c) Failure in further test.

DECLARATION TO BE MADE BY CANDIDATE.

I, the undersigned, _____ hereby declare that the particulars contained above are correct and true to the best of my knowledge and belief; and I make this declaration conscientiously believing it to be true.

Dated at _____ this _____ day of _____ 19____

Signature of Candidate.

Address _____

Declared before me at _____ this _____ day of _____ 19____

Signature and Designation of Proper Officer.

FOR OFFICIAL USE ONLY—FEES.

Amount Received.	Receipt No.	Date.

RESULT OF EXAMINATION.

NOTE.—Insert "Passed", "Failed" or "Not examined", as the case may be. In the Lantern test, if the candidate holds a certificate of competency, the entry should be "Not examined".

I, the undersigned, _____ hereby certify that the above-named candidate was examined by me on the _____ day of _____ 19____ in the letter and lantern tests with the following result:—

Letter Test.	Lantern Test.

Remarks (if any) _____

Date _____

Signature of Examiner.

Port _____

Indien kandidaat seediens gedoen het, meld—				Indien kandidaat nie seediens gedoen het nie, meld—	
Aantal jare en hoedanigheid waarin gedien.		Graad en bekwaamheidsertifikate en datums waarop toegeken.		Indien op die punt staan om ter see te vaar.	In watter hoedanigheid.
Jare.	Hoedanigheid.	Graad.	Datum.		

UITSLAG VAN ENIGE VORIGE GESIGSTOETSE VIR KLEUR EN VORM.

OPMERKING.—Indien die kandidaat voorheen in die gesigstoetse vir kleur en vorm ondersoek is, moet hy hier meld wanneer en waar die laaste ondersoek gehou is en teenoor elke onderwerp invul „Geslaag”, „Gedruip”, „Nie ondersoek nie”, na gelang van die geval. Indien die kandidaat 'n bekwaamheidsertifikaat hou, moet hy nie in die lanterntoets ondersoek word nie, en moet die inskrywing „Nie ondersoek nie” teenoor die onderwerp aangebring word.

Dag.	Maand.	Jaar.	Hawe.	Lettertoets.	Lanterntoets.	Meld of uitslag ten opsigte is van— (a) Eerste maal gedruip. (b) Gedruip deur Direkteur. (c) Gedruip in verdere toets.

VERKLARING WAT DEUR KANDIDAAT GEMAAK MOET WORD.

Ek, die ondergetekende, verklaar hierby dat die besonderhede hierbo bevat na my beste wete en oortuiging juis en waar is; en ek verklaar volgens my gewete en oortuiging dat dit waar is.

Gedateer te _____ op die _____ dag van _____ 19____

Handtekening van kandidaat.

Adres _____

Voor my verklaar te _____ op die _____ dag van _____ 19____

Handtekening en ampstitel van bevoegde beampte.

SLEGS VIR AMPTELIKE GEBRUIK—GELDE.

Bedrag ontvang.	Kwitansie No.	Datum.

UITSLAG VAN EKSAMEN.

OPMERKING.—Voeg in „Geslaag”, „Gedruip”, of „Nie ondersoek nie”, al na gelang van die beval. In die Lanterntoets, indien die kandidaat 'n bekwaamheidsertifikaat hou, moet die inskrywing „Nie ondersoek nie” aangebring word.

Ek, die ondergetekende, sertifiseer hierby dat die bogenoemde kandidaat deur my ondersoek is op die _____ dag van _____ 19____ in die letter- en lanterntoets met die onderstaande uitslag:—

Lettertoets.	Lanterntoets.

Opmerkings (indien enige) _____

Datum _____

Hawe _____

Handtekening van eksaminator.

EXAMINER'S REPORT.

LETTER TEST.

- NOTE.—(1) Four letter sheets must be used in each examination, if the candidate fails to reach the required standard on the first sheet.
 (2) Examiners are required to fill in the following Table showing the number of mistakes (if any) made, irrespective of whether the candidate passes or fails in the letter test.

What was the Condition of the Light when the Candidate was Examined?	State whether the Candidate used Both Eyes together or only his Better Eye.	Sheets Used.	Number of Mistakes in Each Line of Sheet.						
			1st Line.	2nd Line.	3rd Line.	4th Line.	5th Line.	6th Line.	7th Line
		First							
		Second							
		Third							
		Fourth							

LANTERN TEST.

NOTE.—Without special authority holders of certificates of competency may not be examined in the Lantern test.

Large Apertures.				Small Apertures.			
No. Shown on Discs.	Named by Candidate.	No. or Nos. Shown on Discs.	Named by Candidate.	No. or Nos. Shown on Discs.	Named by Candidate.	No. or Nos. Shown on Discs.	Named by Candidate.
Total No. of lights shown:				Total No. of lights shown:			

M. 5.

UNION OF SOUTH AFRICA.

DEPARTMENT OF CUSTOMS AND EXCISE.

MARINE SECTION.

APPLICATION FOR A CERTIFICATE OF SERVICE UNDER THE PROVISIONS OF SECTION EIGHTY OF THE MERCHANT SHIPPING ACT, 1951 (ACT No. 57 OF 1951).

Read the following notes carefully:—

- (1) Section *eighty* of the Merchant Shipping Act, 1951, is printed on page 4 of this form. The section provides full information as to what certificates of service may be granted and as to the persons who may apply for them.
- (2) (a) Persons who are mentioned under section *eighty* (1) (a) may apply at any time for a certificate of service under this Act. However, they are advised to apply as soon as possible since they may not be employed in certain ships unless they are in possession of a valid certificate of service granted under Act No. 57 of 1951. They must also surrender any certificates held by them.
 (b) Persons who are mentioned under section *eighty* (1) (b) may be granted certificates of service under this Act provided they make application before 31st December, 1958, and provided they surrender the certificates held by them.
 (c) Persons who are mentioned under section *eighty* (1) (c) may apply at any time within three (3) years i.e. up to 31st December, 1961, for a certificate of service under the Act. Because these certificates of service will cease to be valid on 31st December, 1961, unless the period of validity is extended by endorsement, it is recommended that persons concerned should apply well in advance of the expiry date in order that it may be possible to hold the practical examination referred to in section *eighty* (6). (See also the special NOTE TO CANDIDATES appearing in Division D of this form.)
- (3) Evidence of the sea service required should be produced and attached to this application. The evidence may be a discharge certificate, or a letter from an owner or other responsible person.
- (4) Applicants for certificates of service as master, navigating officer, skipper, mate or boatswain must pass colour and form vision tests which is a test of eyesight. This does *not* apply to the persons referred to in paragraphs (a) and (b) of Note (2) above.
- (5) Applicants for certificates of service are required to make a sworn declaration on this application form. If a false statement is made the applicant will be guilty of an offence and liable to a fine of £500.

A.—PARTICULARS OF APPLICANT.

Surname (in Block Letters).	Christian Names (in Block Letters).	Date of Birth.	Place of Birth.	Nationality.	Address.

I desire a certificate of service as _____
 and if granted, it should be forwarded to the proper officer at _____ for issue to me.

EKSAMINATOR SE VERSLAG.

LETTERTOETS.

- OPMERKING.—(1) Vier letterkaarte moet in elke eksamen gebruik word, indien die kandidaat versuim om die vereiste standaard op die eerste kaart te behaal.
- (2) Dit word van eksaminatore vereis om die aantal foute (indien enige) wat begaan is in die onderstaande Tabel in te vul, afgesien daarvan of die kandidaat in die lettertoets slaag of drup.

Hoe was die lig toe die kandidaat getoets was?	Meld of die kandidaat beide oë tesame gebruik het of sy beter oog alleenlik.	Kaarte gebruik.	Aantal foute in elke reël van kaart.						
			1ste reël.	2de reël.	3de reël.	4de reël.	5de reël.	6de reël.	7de reël.
		Eerste							
		Tweede							
		Derde							
		Vierde							

LANTERNTOETS.

OPMERKING.—Sonder spesiale magtiging mag houers van bekwaamheidsertifikate nie in die Lanterntoets ondersoek word nie.

Groot openings.				Klein openings.			
Aantal op skywe getoon.	Genoem deur kandidaat.	Aantal op skywe getoon.	Genoem deur kandidaat.	Aantal op skywe getoon.	Genoem deur kandidaat.	Aantal op skywe getoon.	Genoem deur kandidaat.
Totale aantal ligte getoon:				Totale aantal ligte getoon:			

M. 5.

UNIE VAN SUID-AFRIKA.

DEPARTEMENT VAN DOEANE EN AKSYNS.

MARINE-AFDELING.

AANSOEK OM 'N DIENSSERTIFIKAAT KRAGTENS DIE BEPALINGS VAN ARTIKEL TAGTIG VAN DIE HANDELSKEEP-VAARTWET, 1951 (WET No. 57 VAN 1951).

Lees onderstaande opmerkings sorgvuldig:—

- (1) Artikel tagtig van die Handelskeepvaartwet 1951, is op bladsy 4 van hierdie vorm gedruk. Die artikel verskaf volledige inligting aangaande watter dienssertifikate toegeken kan word en aangaande die persone wat daarvoor aansoek kan doen.
- (2) (a) Persone wat in artikel tagtig (1) (a) genoem word kan te eniger tyd aansoek om 'n dienssertifikate kragtens hierdie Wet doen. Hulle word egter aangeraai om so gou doenlik aansoek te doen omdat hulle nie in sekere skepe in diens geneem kan word nie tensy hulle in besit is van 'n geldige dienssertifikate wat kragtens Wet No. 57 van 1951 toegeken is. Hulle moet ook enige sertifikate wat deur hulle gehou word afgee.
- (b) Persone wat in artikel tagtig (1) (b) genoem word kan dienssertifikate kragtens hierdie Wet toegeken word met dien verstande dat hulle voor 31 Desember 1958 aansoek doen en met dien verstande dat hulle die sertifikate wat deur hulle gehou word afgee.
- (c) Persone wat in artikel tagtig (1) (c) genoem word kan te eniger tyd binne drie (3) jaar d.i. tot 31 Desember 1961, aansoek om 'n dienssertifikate kragtens die Wet doen. Omdat hierdie dienssertifikate slegs geldig is tot 31 Desember 1961, tensy die geldigheidsduur deur endossement verleng is, word dit aanbeveel dat die betrokke persone voor die vervaldatum vroegtydig aansoek doen ten einde dit moontlik te maak om die praktiese eksamen waarna in artikel tagtig (6) verwys word, af te neem. (Sien ook die spesiale OPMERKING AAN KANDIDATE wat in Afdeling D van hierdie vorm voorkom.)
- (3) Bewys van die vereiste seediens moet voorgelê en aan hierdie aansoek geheg word. Die bewys kan 'n ontslagsertifikaat, of 'n brief van 'n eienaar of ander verantwoordelike persoon wees.
- (4) Applikante vir dienssertifikate as gesagvoerder, navigasie-offisier, skipper, stuurman of bootsman moet kleur- en vorm-visie-toetse, wat 'n oog toets is, slaag. Hierdie is nie op persone waarna in paragrawe (a) en (b) van Opmerking (2) hierbo verwys word, van toepassing nie.
- (5) Applikante vir dienssertifikate word vereis om op hierdie vorm 'n beëdigde verklaring te doen. Indien 'n valse verklaring gedoen is sal die applikant skuldig aan 'n misdryf wees en onderhewig aan 'n boete van £500.

A.—BESONDERHEDE VAN APPLIKANT.

Familienaam (in drukletters).	Voorname (in drukletters).	Datum van geboorte.	Plek van geboorte.	Nasionaliteit.	Adres.

Ek verlang 'n dienssertifikate as

en indien toegeken, moet dit aan die bevoegde beampte te _____ gestuur word vir uitreiking aan my.

B.—PARTICULARS OF SEA SERVICE.

Particulars of Vessel.						Particulars of Applicant's Sea Service.						Remarks.
Name of Vessel.	Steam, Motor, Other.	Gross Tons.	Horse Power of Engines.	Port of Registry and Official No.: or Registration No. of Vessel.	Trade in which engaged (state whether Fishing, Coasting, other).	Capacity.	From.	To.	Length of Service.			
									Years.	Months.	Days.	
Total Sea Service.....												
Time served for which evidence is now produced.....												
Time served for which no evidence is produced.....												

C.—DECLARATION TO BE MADE BY APPLICANT.

I, the undersigned _____ hereby declare:—

- (1) that the particulars contained in Divisions A and B of this form are correct and true to the best of my knowledge and belief; and
 (2) that I have *(not) a certificate of competency or service *(which I now surrender).

Signature of Applicant.

(If applicant is unable to write, he should make his mark in the space above.)

Declared before me at _____ this _____ day of _____ 19 _____

Signature and Designation of Proper Officer or Commissioner of Oaths.

* Delete if not applicable.

D.—CERTIFICATE OF EXAMINER.

Date and Place of Colour and Form Vision Tests.		Result.		Personal Description of Candidate.						Personal Marks or Peculiarities (if any).
				Height.		Colour of—		Race (state whether European, Coloured, Native, Indian or Other).		
Date.	Place.	Letter Test.	Lantern Test.	Feet.	Inches.	Eyes.	Hair.			

I hereby certify that the particulars contained in Division D are to the best of my knowledge and belief correct, and in my opinion a certificate of service as _____ should be issued.

Dated at _____ this _____ day of _____ 19 _____

Date Stamp.

Signature of Examiner.

NOTE TO CANDIDATE.

A certificate of service granted under section eighty (2) (c) of this Act remains in force until 31st December, 1961. To preserve its validity, the holder of such a certificate should apply *before* the above date for an endorsement to be made on his certificate. This endorsement is made after the holder passes a practical (oral) examination.

To the Director of Merchant Shipping,
 Pretoria.

E.—FOR OFFICIAL USE ONLY.

Grade and No of Certificate Issued.	Date and Place of Issue.	Previous Certificates Surrendered.

GRANTING OF CERTIFICATES OF SERVICE.

Section eighty of the Merchant Shipping Act, 1951, reads:—

(1) Any person who—

- (a) immediately before the repeal by this Act of the Merchant Shipping (Certificates of Competency) Act, 1925 (Act No. 45 of 1925), was entitled, in terms of the proviso to sub-section (3) of section one of that Act, to act as master, mate or engineer; or
 (b) is the holder of an uncanceled certificate of service granted under section fifteen of the said Merchant Shipping (Certificates of Competency) Act, 1925; or
 (c) at any time before the coming into operation of this section has for a continuous period of not less than one year, or within three years before the said coming into operation has for two or more periods amounting in the aggregate to not less than one year—

(i) acted as boatswain or as assistant to the engineer or driver of a fishing boat of one hundred or more gross register tons registered in the Union; or

(ii) acted as master, skipper, mate, second hand, engineer or driver or as assistant to the engineer or driver of a coasting ship or a fishing, sealing or whaling boat of less than one hundred gross register tons registered in the Union,

may apply to the Director for a certificate of service.

B.—BESONDERHEDE VAN SEEDIENS.

Besonderhede van vaartuig.						Besonderhede van applikant se seediens.						Opmerkings.
Naam van vaartuig.	Stoom, motor, ander.	Bruto tonnemaat.	Perdekrag van masjiene.	Registrasiehawe en amptelike No.; of registrasie No. van vaartuig.	Handel waarin gedryf word (meld of viskushandel, ander).	Hoedanigheid.	Vanaf.	Tot.	Diensttermyn.			
									Jare.	Maande.	Dae.	
Totale seediens.....												
Dienstyd waarvoor bewys nou voorgelê is.....												
Dienstyd waarvoor geen bewys voorgelê is nie.....												

C.—VERKLARING WAT DEUR APPLIKANT GEDOEN MOET WORD.

Ek, die ondergetekende.....verklaar hierby:—

- (1) dat die besonderhede wat in Afdelings A en B van hierdie vorm bevat is, na my beste wete en oortuiging juis en waar is; en
- (2) dat ek *(nie) 'n bekwaamheid- of dienssertifikaat het *(nie) *(wat ek nou afgee).

Handtekening van applikant.

(Indien die applikant nie kan skrywe nie, moet hy sy merk in die spasie hierbo, maak.)

Voor my verklaar te.....op die.....dag van.....19.....

Handtekening en ampstitel van bevoegde beampte of Kommissaris van Ede.

* Skrap indien nie van toepassing nie.

D.—SERTIFIKAAT VAN EKSAMINATOR.

Datum en plek van kleur- en vorm- visie-toetse.		Uitslag.		Persoonlike beskrywing van kandidaat.					
				Lengte.		Kleur van—		Ras (meld of Blanke, Kleurling, Naturel, Indiër of ander).	Persoonlike merke of eienaardighede (indien enige).
Datum.	Plek.	Lettertoets.	Lanterntoets.	Voet.	Duim.	Oë.	Hare.		

Hierby sertifiseer ek dat die besonderhede bevat in Afdeling D na my beste wete en oortuiging juis is, en myninsiens mag 'n dienssertifikaat as.....toegeken word.

Gedateer te.....op die.....dag van.....19.....

Datumstempel.

Handtekening van eksaminator.

OPMERKING AAN KANDIDAAT.

'n Dienssertifikaat toegeken kragtens artikel tagtig (2) (c) van hierdie Wet bly van krag tot 31 Desember 1961. Om die geldigheidsduur te behou, moet die houer van sodanige sertifikaat voor bogenoemde datum aansoek doen om 'n endossement op sy sertifikaat aan te bring. Hierdie endossement word aangebring nadat die houer in 'n praktiese (mondelinge) eksamen geslaag het.

Aan Die Direkteur van Handelskeepvaart,
Pretoria.

E.—SLEGS VIR AMPTELIKE GEBRUIK.

Graad en nommer van sertifikaat uitgereik.	Datum en plek van uitreiking.	Vorige sertifikate afgegee.

TOEKENNING VAN DIENSSERTIFIKATE.

Artikel tagtig van die Handelskeepvaartwet, 1951, lees:—

(1) Enige persoon wat—

- (a) onmiddellik voor die herroeping van die Koopvaardij (Certifikaten van Bekwaamheid) Wet, 1925 (Wet No. 45 van 1925), deur hierdie Wet, kragtens die voorbehoudsbepaling van subartikel (3) van artikel een van daardie Wet geregtig was om as gesagvoerder, stuurman of ingenieur op te tree; of
- (b) die houer is van 'n ongekanselleerde dienssertifikaat verleen kragtens artikel vyftien van genoemde Koopvaardij (Certifikaten van Bekwaamheid) Wet, 1925; of
- (c) te eniger tyd voor die inwerkingtreding van hierdie artikel ononderbroke vir minstens een jaar, of binne drie jaar voor gemelde inwerkingtreding vir twee of meer tydperke van altesame minstens een jaar—
 - (i) as bootsman of as assistent tot die masjinis of masjienerwerker van 'n vissersboot van eenhonderd of meer bruto-registerton wat in die Unie geregistreer is, opgetree het; of
 - (ii) as skeepskaptein, skipper, stuurman, maat, bootsman, masjinis of masjienerwerker of as assistent tot die masjinis of masjienerwerker van 'n kusvaarder of 'n vissersboot of robbe- of walvisvaarder van minder as eenhonderd bruto-registerton wat in die Unie geregistreer is, opgetree het,

kan om 'n dienssertifikaat by die Direkteur aansoek doen.

(2) The Director may grant to the applicant—

- (a) if the application is made under paragraph (a) of sub-section (1), an appropriate certificate of service authorising him to act as master, navigating officer or engineer-officer, as the case may be, of a ship of not more than one thousand gross register tons (in the case of a master or navigating officer) or of not more than one thousand indicated horse-power (in the case of an engineer-officer); or
- (b) if the application is made under paragraph (b) of sub-section (1), an appropriate certificate of service authorising him to act as skipper, mate or marine engineman, as the case may be, of a fishing boat; or
- (c) if the application is made—

(i) under paragraph (c) (i) of sub-section (1), an appropriate certificate of service authorising him to act as boatswain or assistant marine engineman, as the case may be, of a fishing boat; or

(ii) under paragraph (c) (ii) of sub-section (1), an appropriate certificate of service authorising him to act as skipper, mate, engineer-officer or assistant marine engineman, as the case may be, of a coasting ship or a fishing, sealing or whaling boat, as the case may be, of less than one hundred gross register tons, and the capacity in which he is so authorised to act shall not be higher than the lowest capacity in which he acted during the period or periods in respect of which his claim is based.

(3) Before a certificate of service is granted there shall be surrendered to the Director—

- (a) if the application is made under paragraph (a) of sub-section (1), and by virtue of the possession of such a certificate as is referred to in the proviso mentioned in that paragraph, that certificate; or
- (b) if the application is made under paragraph (b) of sub-section (1), the certificate upon the possession of which the application is based.

(4) In the case of an application under paragraph (c) of sub-section (1), the grant of a certificate of service may be withheld until the applicant has passed the colour and form vision tests prescribed.

(5) Sub-sections (1) and (2) shall apply in respect of certificates of service referred to in paragraph (b) of sub-section (1) during the period of one year after the coming into operation of this section and no longer.

(6) A certificate of service granted in terms of paragraph (c) of sub-section (2) shall remain in force for a period of three years after the coming into operation of this section and no longer: Provided that if before the expiration of that period the person to whom the certificate is issued passes satisfactorily a practical examination prescribed by the Director and designed to test the ability of the holder of the certificate to act in the capacity mentioned in the certificate, the Director shall cause the fact that he has so passed such examination to be recorded upon the certificate, and subject to the provisions of sections eighty-seven, eighty-eight and eighty-nine, the certificate shall remain in force after the expiration of the said period.

(7) A certificate of service granted in terms of this section shall, for the purposes of this Act, and to the extent indicated in such certificate of service, be deemed to be a certificate of competency.

M 6 _____
No. _____
Name of applicant _____
Rotation number _____
Grade for which passed _____
Authority given to the above
Candidate to obtain his *Certificate
of Competency/Qualifica-
tion from the Proper Officer at
the Port of _____
Date _____
Examiner _____
* Delete the word which does
not apply

UNION OF SOUTH AFRICA.
DEPARTMENT OF CUSTOMS AND EXCISE.
MARINE SECTION.

AUTHORITY FOR DELIVERY OF A CERTIFICATE OF COMPETENCY OR
QUALIFICATION.

(N.B.—This authority is subject to the approval of the Director of Merchant Shipping, Pretoria.)

Name of Applicant _____ Grade for which passed _____
Height _____ Feet _____ Inches. Colour of Eyes _____ Hair _____
Race (European, Coloured, Native, Indian: other, specify) _____

Signature of Applicant.

Please deliver to the above-named person the Certificate of *Competency/Qualification when he has completed the particulars required therein and testimonials or other documents forwarded to you on his behalf by the Director of Merchant Shipping, Pretoria.

Port _____ Date _____ 19 _____

To _____ Signature of Examiner.

* Delete the word which does not apply.

M 7 _____
Port _____
Name of candidate _____
Commencing date of last exami-
nation _____
Reference to correspondence
(if any) _____
Rotation No. _____
Written _____
Orals _____
Signals _____
Date eligible for re-examination _____
Initials of Examiner _____
Date of Issue _____

UNION OF SOUTH AFRICA.
DEPARTMENT OF CUSTOMS AND EXCISE.
MARINE SECTION.

EXAMINATION OF MASTERS, NAVIGATING OFFICERS, SKIPPERS, MATES,
BOATSWAINS, MARINE ENGINEMEN AND ASSISTANT MARINE ENGINEMEN.
RESULTS OF EXAMINATION.

Name of Candidate _____ Rotation No. _____

Reference to correspondence (if any) _____

Date.	Port.	Grade.	Examination.	Written.*	Oral.*	Signals.*
			First attempt.....			
			Second attempt...			
			Third attempt....			

* Insert "Passed", "Failed" or "Not Examined".

Office Stamp.

Date eligible for re-examination _____

Signature of Candidate.

Signature of Examiner.

N.B.—This form should be produced by the candidate with his documents on subsequent examination.

(2) Die Direkteur kan aan die applikant—

- (a) as die aansoek kragtens paragraaf (a) van subartikel (1) gedoen word, 'n paslike dienssertifikaat toestaan wat hom magtig om as gesagvoerder, navigasie-offisier of ingenieuroffisier, al na die geval, van 'n skip van hoogstens eenduiseid bruto-registerton (in die geval van 'n gesagvoerder of navigasie-offisier) of van hoogstens eenduiseid aangegeve perdekrag (in die geval van 'n ingenieuroffisier) op te tree; of
- (b) as die aansoek kragtens paragraaf (b) van subartikel (1) gedoen word, 'n paslike dienssertifikaat toestaan wat hom magtig om as skipper, stuurman of see-masjinis, al na die geval, van 'n vissersboot op te tree; of
- (c) as die aansoek—

- (i) kragtens paragraaf (c) (i) van subartikel (1) gedoen word, 'n paslike dienssertifikaat toestaan wat hom magtig om as bootsman of as assistent-see-masjinis, al na die geval, van 'n vissersboot op te tree; of
- (ii) kragtens paragraaf (c) (ii) van subartikel (1) gedoen word, 'n paslike dienssertifikaat toestaan wat hom magtig om op te tree as skipper, maat, ingenieuroffisier of assistent-see-masjinis, al na die geval, van 'n kusvaarder of 'n vissersboot of robbe- of walvisvaarder, al na die geval, van minder as eenhonderd bruto-registerton, en die hoedanigheid waarin hy aldus gemagtig word om op te tree mag nie hoër wees nie as die laagste hoedanigheid waarin hy opgetree het gedurende die tydperk of tydperke ten aansien waarvan sy eis gegrond is.

(3) Voordat 'n dienssertifikaat toegeken word, word daar aan die Direkteur afgegee—

- (a) as die aansoek gedoen word kragtens paragraaf (a) van subartikel (1) en uit hoofde van die besit van 'n sertifikaat bedoel in die in daardie paragraaf vermelde voorbehoudsbepaling, daardie sertifikaat; of
- (b) as die aansoek gedoen word kragtens paragraaf (b) van subartikel (1), die sertifikaat op die besit waarvan die aansoek gegrond is.

(4) In geval van 'n aansoek kragtens paragraaf (c) van subartikel (1) kan die toekenning van 'n dienssertifikaat agterweê gehou word totdat die applikant in die voorgeskrewe gesigstoetse vir kleur en vorm geslaag het.

(5) Subartikel (1) en (2) is van toepassing op die in paragraaf (b) van subartikel (1) bedoelde dienssertifikate gedurende die tydperk van een jaar na die inwerkingtreding van hierdie artikel en niks langer nie.

(6) 'n Dienssertifikaat wat kragtens paragraaf (c) van subartikel (2) toegeken is, bly van krag vir die tydperk van drie jaar na die inwerkingtreding van hierdie artikel en niks langer nie. Met dien verstande dat indien die persoon aan wie die sertifikaat toegeken is, voor verstryking van daardie tydperk in 'n praktiese eksamen wat deur die Direkteur voorgeskryf is, en wat bedoel is om die bekwaamheid van die houer van die sertifikaat om in die hoedanigheid vermeld in die sertifikaat op te tree te toets, bevredigend slaag, die Direkteur 'n aantekening van die feit dat hy in sodanige eksamen aldus geslaag het op die sertifikaat laat maak, en, behoudens die bepaling van artikels sewe-en-tagtig, agt-en-tagtig en nege-en-tagtig, bly die sertifikaat na verstryking van vermelde tydperk van krag.

(7) 'n Dienssertifikaat wat kragtens hierdie artikel toegeken is, word vir die doeleindes van hierdie Wet en in die mate in sodanige dienssertifikaat aangedui, as 'n bekwaamheidsertifikaat beskou.

M 6 _____

No. _____

Naam van applikant _____

Volgnommer _____

Graad waarin geslaag _____

Magtiging aan bogemelde kandidaat verleen om sy *Bekwaamheidsertifikaat / Bevoegdheidsertifikaat van die Bevoegde Beampte by die Hawe _____ te ontvang.

Datum _____

Eksaminator _____

* Skrap die woord wat nie van toepassing is nie.

UNIE VAN SUID-AFRIKA.
DEPARTEMENT VAN DOEANE EN AKSYNS.
MARINE-AFDELING.

MAGTIGING VIR AFLEWERING VAN 'N BEKWAAMHEIDSERTIFIKAAT OF BEVOEGDHEIDSERTIFIKAAT.

(L.W.—Hierdie magtiging is onderworpe aan die goedkeuring van die Direkteur van Handel-skeepvaart, Pretoria.)

Naam van applikant _____ Graad waarin geslaag _____

Lengte _____ Voet _____ Duim _____ Kleur van oë _____ Hare _____

Ras (Blanke, Kleurling, Naturel, Indiër: ander, spesifiseer) _____

Handtekening van applikant.

Geliewe aan bogemelde persoon af te lewer die *Bekwaamheidsertifikaat/Bevoegdheidsertifikaat nadat hy die besonderhede wat daarin vereis word voltooi het en getuigskrifte of ander dokumente wat namens hom aan u deur die Direkteur van Handelskeepvaart, Pretoria, deurgestuur is.

Hawe _____ Datum _____ 19 _____

Aan _____ Handtekening van eksaminator.

* Skrap die woord wat nie van toepassing is nie.

M 7 _____

Hawe _____

Naam van kandidaat _____

Aanvangsdatum van laaste eksamen _____

Verwysing na korrespondensie _____

(indien enige) _____

Volgnommer _____

Skriftelik _____

Mondelings _____

Seine _____

Toelaatbare datum van eksamen opnuut _____

Voorletters van eksaminator _____

Datum van uitreiking _____

UNIE VAN SUID-AFRIKA.
DEPARTEMENT VAN DOEANE EN AKSYNS.
MARINE-AFDELING.

EKSAMEN VAN GESAGVOERDERS, NAVIGASIE-OFFISIERS, SKIPPERS, STUURMANNE, BOOTSMANNE, SEE-MASJINISTE EN ASSISTENT-SEE-MASJINISTE.
UITSLAG VAN EKSAMEN.

Naam van kandidaat _____ Volgnommer _____

Verwysing na korrespondensie (indien enige) _____

Datum.	Hawe.	Graad.	Eksamen.	Skriftelik.*	Mondelings.*	Seine.*
			Eerste poging....			
			Tweede poging...			
			Derde poging....			

* Voeg in „Geslaag”, „Gedruip” of „Nie Geëksamineer nie”.

Kantoorstempel.

Toelaatbare datum van eksamen opnuut _____

Handtekening van kandidaat.

Handtekening van eksaminator.

L.W.—Hierdie vorm moet deur die kandidaat tesame met sy dokumente op die daaropvolgende eksamen voorgelê word.

DEPARTMENT OF CUSTOMS AND EXCISE.

MARINE SECTION.

MERCHANT SHIPPING ACT, 1951.

(ACT No. 57 of 1951.)

CERTIFICATE OF WATCH-KEEPING SERVICE.

This is to certify that Mr. _____
has served on the ship _____
in the capacity of *first/secnd/third watch-keeping officer.

During this time Mr. _____ was an officer in *full/†effective charge of a watch for eight
hours out of every 24 hours at sea, except as stated below.
Watches were not doubled at any time during the voyage.‡
Watches were doubled between the following dates and at no other times _____

During this time Mr. _____ served as the *senior/junior of two bridge-keeping officers.§

Signature of Master.

* Delete words which do not apply.

N.B.—Where service as First Watch-keeping Officer is claimed, the Master should state if the officer was next in seniority to the Master. If the ship carried only two watch-keeping officers, the Master should state this in the certificate.

† “Effective charge of a watch” means responsibility for the watch, but it does not preclude occasional supervision by a senior officer, provided that the senior officer does not take charge of the watch at any time.

‡ Delete this paragraph if watches were doubled at any time during the voyage.

§ Delete this paragraph if watches were not doubled at any time during the voyage.

CERTIFICATE OF SERVICE AND CONDUCT.

This is to certify that Mr. _____
has served as _____ in the ship _____
under my command from _____ to _____
during which period he has conducted himself* _____

Signature of Master.

Date.

* Here the Master is to insert in his own handwriting his remarks on the conduct, ability and sobriety of the officer.

COLOUR AND FORM VISION TESTS.
(See Regulation 15.)

ANNEXURE B.

DETAILS AS TO THE CONDUCT OF COLOUR AND FORM VISION TESTS.

(NOTE.—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. The tests employed are two, a letter and a lantern test, details of which are given below. The letter test is a test of form vision only, and the lantern test is a test of form and colour vision combined).

GENERAL.

1. The tests shall be conducted under the strict personal supervision of the Examiner, who shall keep a record of all mistakes made by the candidate both in the letter test and in the lantern test.

2. *Spectacles not Allowed.*—During the examinations in the colour and form vision tests, candidates shall not be allowed to use spectacles, contact lenses, or glasses of any kind, or any other artificial aid to vision. Candidates shall have the option of using either eye separately or both eyes together.

LETTER TEST.

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

4. *Standard of Vision Required.*—Every candidate shall 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 sixteen feet from the eye.

5. *Method of Testing.*—Artificial illumination shall be used in preference to daylight owing to the impossibility of securing uniformity where the latter is used. Where suitable dark rooms are available the test sheets shall be hung on a wall at a height of five or six feet from the floor, with two electric bulbs each of 40 watts placed horizontally and suitably screened so that the light falls directly on two lines of letters on the sheet.

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

If a suitable dark room is not available the test sheets shall be hung on a wall at the required height in a good light, but not in direct sunlight.

DEPARTEMENT VAN DOEANE EN AKSYNS.

MARINE-AFDELING.

HANDELSKEEPVAARTWET 1951.

(WET NO. 57 VAN 1951.)

WAGHOU-DIENSSERTIFIKAAT.

Hierby word gesertifiseer dat mnr. _____

diens gedoen het op die skip _____
in die hoedanigheid van *eerste/tweede/derde waghout-offisier.

Gedurende hierdie tydperk was mnr. _____ 'n offisier in *volle/teffektiewe bevel van 'n wag vir agt ure uit elke 24 uur ter see, behalwe soos hieronder vermeld.
Waghout-diens was nie te eniger tyd gedurende die seereis verdubbeld nie.†
Waghout-diens was gedurende die volgende datums en op geen ander tyd verdubbeld nie _____

Gedurende hierdie tydperk het mnr. _____ as die *senior/junior van twee brughout-diens-offisiere gedien.§

Handtekening van Gesagvoerder.

* Skrap woorde wat nie van toepassing is nie.

L.W.—Indien aanspraak op diens as eerste waghout-offisier gemaak word, moet die gesagvoerder meld of die offisier na die gesagvoerder die volgende in voorrang was. Indien daar net twee waghout-offisiere op die skip in diens is, moet die gesagvoerder dit op die sertifikaat vermeld.

† „Effektiewe bevel van 'n wag” beteken verantwoordelikheid vir die wag, maar dit sluit nie 'n toevallige toesig deur 'n senior offisier uit nie, met dien verstande dat daardie senior offisier nie te eniger tyd bevel van die wag oorneem nie.

‡ Skrap hierdie paragraaf indien waghout-diens te eniger tyd gedurende die seereis verdubbeld was.

§ Skrap hierdie paragraaf indien waghout-diens nie te eniger tyd gedurende die seereis verdubbeld was nie.

SERTIFIKAAT VAN DIENS EN GEDRAG.

Hierby word gesertifiseer dat mnr. _____

diens gedoen het as _____ op die skip _____

onder my bevel vanaf _____ tot _____

en dat sy gedrag gedurende hierdie tydperk* _____

Handtekening van gesagvoerder.

Datum _____

* Hier moet die gesagvoerder in sy eie handskrif sy opmerkings aangaande die gedrag, bekwaamheid en soberheid van die offisier byvoeg.

GESIGSTOETSE VIR KLEUR EN VORM.

(Sien regulasie 15.)

AANHANGSEL B.

BESONDERHEDE AANGAANDE DIE HOU VAN GESIGSTOETSE VIR KLEUR EN VORM.

(LET WEL.—Die doel van hierdie toetse is om te verseker dat die gesigsvermoë van die kandidaat skerp genoeg is om hom in staat te stel om in die verte die ligte van skepe ter see duidelik te sien en te identifiseer. Die ondervinding het geleer dat hy vir hierdie doel in die gesigstoetse, beide vir vorm en kleur, in staat moet wees om sekere minimum standaarde te behaal. Daar word twee toetse gestel, 'n letter- en lanterntoets, waarvan besonderhede hieronder uiteengesit word. Die lettertoets is slegs 'n gesigstoets vir vorm, en die lanterntoets is 'n gekombineerde gesigstoets vir vorm en kleur.)

ALGEMEEN.

1. Die toets word onder strenge toesig van die eksaminator gehou, wat 'n aantekening moet hou van al die foute wat deur die kandidaat in die letter- asook in die lanterntoets gemaak word.

2. *Gebruik van 'n bril word nie toegelaat nie.*—Gedurende die eksamens in die gesigstoetse vir kleur en vorm word kandidate nie toegelaat om enige soort bril, kontaklen, of verkyker, of enige ander kykmiddels te gebruik nie. Kandidate het die keuse om die een of ander oog afsonderlik of albei oë gesamentlik te gebruik.

LETTERTOETS.

3. Die eerste toets wat kandidate moet aflê is die lettertoets, wat op die Snellenbeginsel deur middel van letterblaaië gehou word. Elke blad bevat sewe reëls, waarvan die vyfde, sesde en sewende reël onderskeidelik met standaarde 5/10, 5/7.5 en 5/5 ooreenstem.

4. *Verlangde Gesigstandaard.*—'n Kandidaat moet in staat wees om vyf van die ses letters in die sesde reël en vier van die sewe letters in die sewende reël, op 'n afstand van sestien voet van die oog af, korrek af te lees.

5. *Toetsmetode.*—Weens die onmoontlikheid om by gebruik van daglig uniformiteit te verkry, moet by voorkeur kunsmatige verligting gebruik word. Waar geskikte donkerkamers beskikbaar is, moet die toetsblaaië vyf of ses voet hoog van die vloer af teen 'n muur gehang word, met twee elektriese gloeilampe elk van 40 watt, horisontaal aangebring, met geskikte skerms, sodat die lig regstreeks op twee letterreëls van die blad val.

Die toetskamer moet matig verlig word en daar moet sorg gedra word dat daar geen skerp ligte of blink voorwerpe in die gesigsveld van die kandidaat is nie. Uiterste kontraste tussen die verligte toetskaart en die agtergrond moet vermy word.

Ingeval 'n geskikte donkerkamer nie beskikbaar is nie, moet die toetsblaaië op die vereiste hoogte teen 'n muur in 'n goeie lig gehang word, maar nie regstreeks in die sonlig nie.

When the candidate has taken up the correct position one of the sheets shall be exposed, and he shall 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 shall be considered as having passed and may then proceed to the lantern test unless he holds a certificate of competency as master, navigating officer, skipper, mate or boatswain, in which case the lantern test need not be taken.

6. *Failure.*—(a) If a candidate fails to reach the standard required on the first sheet, he shall be tested with at least four sheets and the following alternatives explained to him:—

- (i) 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 shall be issued to him; or
- (ii) 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, shall be recorded on the prescribed form and forwarded to the Director, who shall decide whether the candidate has passed or failed in form vision.

(b) Whenever a candidate fails to pass the letter test he shall be advised to consult an ophthalmologist with a view to ascertaining the nature of the defect in his form vision, and whether it is curable.

LANTERN TEST.

7. *Apparatus.*—A special lantern and a mirror are provided for this test. The test shall be conducted in a room so darkened as to exclude all light. The lantern shall 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. *Darkness Adaptation.*—If the candidate makes a mistake at the beginning of the lantern test he shall be kept in a completely or partially darkened room for at least a quarter of an hour and shall then begin the test again.

9. *Method of Testing.*—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 twelve glasses of three colours—red, white and green. At the beginning of the examination the candidate shall be shown a series of lights through the large aperture, and he shall be required to name the colours as they appear. In showing the white light it shall be emphasised that this light is not a pure white. If a candidate makes a mistake in calling this light "red" a proper red light shall be shown immediately after and his attention directed to the difference between the two.

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

10. *Passing or Failure.*—(a) If a candidate does not make any mistakes in the lantern test after passing the letter test he shall be deemed to have passed the whole examination and the Examiner shall issue a certificate to that effect.

(b) 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 shall be considered to have failed in the lantern test.

(c) If a candidate makes any other mistake with the lantern, i.e. if he calls white "red" or red "white" or confuses green and white, his case shall be referred to the Director.

(d) A candidate shall be notified by the Examiner of his success or failure or else that his case has been referred to the Director, and in that event he shall be told that the decision as to whether he has passed or failed, or must undergo a further examination, will be communicated to him in due course. Pending the receipt of the Director's instructions, a candidate for a certificate of competency shall only be allowed to proceed with such examination on the express understanding that the latter examination will be cancelled in the event of failure at the colour and form vision tests.

11. *Cases Referred to Director.*—Whenever a case has been referred to the Director, he shall decide whether the candidate has passed or has failed or must undergo a further test. If the Director decides that the candidate must undergo a further test, the candidate shall be informed of the date, time and place of the further examination. No additional fee shall be charged for such examination. Every such examination shall be conducted by an examiner other than the examiner who conducted the first test. The examiner shall decide that the candidate has passed or that he has failed the test.

APPEALS.

12. Whenever—

- (a) the candidate has failed to pass the first lantern test; or
- (b) the Director has decided in a case referred to him that the candidate has failed to pass the first lantern test; or
- (c) the candidate whose case has been referred to the Director has failed to pass the further lantern test decided upon by the Director;

the candidate may appeal in writing to the Director, and thereupon he shall, upon payment of a fee of two guineas, which shall be refunded to him if he passes, be allowed to undergo a further special test.

The further special test shall, whenever possible, be conducted by an examiner other than an examiner who conducted one of the earlier tests, who shall be advised by an ophthalmic surgeon appointed by the Director. The candidate may request the presence at the expense of the candidate of a relative or friend or of an additional ophthalmic surgeon to be named by him, for the purpose of witnessing the examination.

ANNEXURE C.

(Here will be published the International Regulations for Preventing Collisions at Sea, 1948—see regulation 56.)

ANNEXURE D.

SYLLABUSES FOR EXAMINATIONS.

(See regulation 67.)

[NOTE.—*Knowledge of Languages.* Because of the reciprocal arrangements under which South African certificates of competency for the grades set forth in paragraphs (a), (b) and (c) of sub-section (1) of section *seventy-five* of the Act, viz., master, chief navigating officer and second navigating officer of a foreign-going ship, are accepted as qualifications for service in Commonwealth ships, every candidate shall satisfy the examiner that he is able to speak and write the English language sufficiently well to perform the duties required of him on board ship.]

I. SECOND NAVIGATING OFFICER OF A FOREIGN-GOING SHIP.

Candidates should demonstrate their understanding of their 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.

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.

The "Principles of Navigation" and "Mathematics" papers 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.

(1) PAPER I. (WRITTEN.)

GENERAL SHIP KNOWLEDGE. (Three hours.)

(a) 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.

As die kandidaat die juiste plek ingeneem het, moet een van die kaarte ontbloot word, en moet hy gevra word om die letters van links na regs, met aanvang van bo na onder, af te lees.

As na afloop van die toets bevind word dat die kandidaat die vereiste standaard behaal het, word daar beskou dat hy geslaag het en kan hy met die lanterntoets aangaan, tensy hy die houer is van 'n bekwaamheidsertifikaat as gesagvoerder, navigasie-offisier, skipper, stuurman of bootsman, in watter geval die lanterntoets verval.

6. *Druiping.*—(a) Ingeval 'n kandidaat nie daarin slaag om die vereiste standaard op die eerste blad te behaal nie, moet hy met minstens vier blaaie getoets word en die volgende alternatiewe aan hom verduidelik word—

(i) hy kan die eksamen onderbreek en binne minstens drie maande weer eksamen kom aflê, in watter geval 'n sertifikaat dat hy gedruip het aan hom uitgereik word; of

(ii) hy kan met die lanterntoets aangaan. In hierdie geval moet 'n aantekening op die voorgeskrewe vorm gemaak word van al die foute in die lettertoets en al die foute, indien enige, in die lanterntoets. Dit word dan aan die Direkteur deurgestuurd om te besluit of die kandidaat in die gesigstoets vir vorm geslaag of gedruip het.

(b) As 'n kandidaat in die lettertoets druipt, moet hy aangeraai word om 'n oogheelkundige te gaan raadpleeg ten einde te laat vasstel wat die gebrek in sy gesigsvermoë is om vorms te onderskei, en of dit geneesbaar is.

LANTERNTOETS.

7. *Toestel.*—Vir hierdie toets word 'n spesiale lanterntoets verskaf. Die toets moet in 'n kamer gehou word wat so verdonker is dat daar geen lig indring nie. Die lanterntoets moet reg voor die spieël geplaas word sodat die voorkant van die lanterntoets presies tien voet van die spieël af is, en in so 'n stand dat die ligte wat in die spieël weerkaats duidelik is as die kandidaat links van die lanterntoets daarna kyk.

8. *Aanpassing van donkerheid.*—As die kandidaat by die aanvang van die lanterntoets 'n fout maak, moet hy minstens 'n kwartier in 'n geheel of half verdonkerde kamer gehou word en daarna weer met die toets aangaan.

9. *Metode van toetsing.*—Die lanterntoets wat vir die eksamen verskaf word, is so saamgestel dat een groot en twee klein ligte sigbaar is, en is voorsien van twaalf skywe met drie kleure—rooi, wit en groen. By die aanvang van die eksamen word daar 'n reeks ligte deur 'n groot opening aan die kandidaat getoon, en as die kleure verskyn moet hy die name daarvan noem. As die wit lig getoon word, moet dit beklemtoon word dat dit nie 'n suiwer wit lig is nie. As 'n kandidaat 'n fout maak en dit 'n „rooi” lig noem, moet daar dadelik 'n regte rooi lig getoon word en sy aandag moet dan op die onderskeid tussen die twee ligte gevestig word.

Nadat 'n reeks ligte deur die groot opening getoon is, moet daar twee volledige kringlope en een onderbroke kringloop met die klein openinge gedoen word, en die kleure van elke stel van twee ligte moet van links na regs deur die kandidaat genoem word.

10. *Slaag of druipt.*—(a) Ingeval 'n kandidaat, nadat hy in die lettertoets geslaag het, in die lanterntoets geen foute maak nie, word daar beskou dat hy in die hele eksamen geslaag het, en 'n sertifikaat met hierdie strekking word dan deur die eksaminator uitgereik.

(b) As 'n kandidaat, ditsy met die groot opening of die twee klein openinge van die lanterntoets, rooi vir groen en groen vir rooi aansien, word daar beskou dat hy in die lanterntoets gedruip het.

(c) As 'n kandidaat enige ander fout met die lanterntoets maak, dit is, as hy wit „rooi” of rooi „wit” noem, of groen en wit verwar, word sy geval na die Direkteur verwys.

(d) Die eksaminator moet die kandidaat verwittig of hy geslaag of gedruip het of anders dat sy geval na die Direkteur verwys is, en in daardie geval sal hy van die beslissing of hy geslaag of gedruip het, verwittig word, en as hy 'n verdere eksamen moet aflê, sal hy te geleener tyd daarvan in kennis gestel word. Hangende die ontvangs van die Direkteur se opdragte, word 'n kandidaat toegelaat om met die eksamen vir 'n bekwaamheidsertifikaat aan te gaan, maar slegs op die uitdruklike voorwaarde dat laasgenoemde eksamen gekanselleer sal word ingeval hy in die gesigstoets vir kleur en vorm druipt.

11. *Gevalle wat na die Direkteur verwys word.*—Elke keer as 'n geval na die Direkteur verwys word, besluit hy of die kandidaat geslaag of gedruip het of 'n verdere toets moet aflê. As die Direkteur besluit dat die kandidaat 'n verdere toets moet aflê, word die kandidaat van die datum, tyd en plek van die verdere eksamen in kennis gestel. Geen addisionele gelde word vir sodanige eksamen gevorder nie. Elke sodanige eksamen moet deur 'n eksaminator, uitgesonderd die eksaminator wat die eerste toets afgeneem het, gehou word. Die eksaminator besluit of die kandidaat in die toets geslaag of gedruip het.

APPELLE.

12. Elke keer as—

(a) die kandidaat in die eerste lanterntoets gedruip het; of

(b) die Direkteur in 'n geval wat na hom verwys is, besluit het dat die kandidaat in die eerste lanterntoets gedruip het; of

(c) die kandidaat wie se geval na die Direkteur verwys is, in die verdere lanterntoets, volgens die beslissing van die Direkteur, gedruip het,

kan die kandidaat skriftelik na die Direkteur appelleer, en daarna word hy, by betaling van twee ghienies, wat aan hom terugbetaal word as hy slaag, toegelaat om 'n verdere spesiale toets of te lê.

'n Verdere spesiale toets moet, waar doenlik, gehou word deur 'n eksaminator, uitgesonderd 'n eksaminator wat een van die vorige toetse afgeneem het, wat dan deur 'n oogdokter deur die Direkteur benoem, geadviseer moet word. Die kandidaat kan, vir eie rekening, versoek dat 'n bloedverwant, of vriend of 'n addisionele oogdokter, deur hom benoem, as getuies by die afneem van die eksamen teenwoordig moet wees.

AANHANGSEL C.

(Die Internasionale Regulasies vir die voorkoming van botsings op see, 1948, sal hier gepubliseer word—vergelyk regulasie 56.)

AANHANGSEL D.

LEERPLANNE VIR EKSAMENS.

(Sien Regulasie No. 67.)

[LET WEL.—*Kennis van Tale.* Vanweë die wederkerige ooreenkoms waarkragtens Suid-Afrikaanse bekwaamheidsertifikate vir die grade in paragrawe (a), (b) en (c) van subartikel (1) van artikel vyf-en-sewentig van die Wet uiteengesit, nl. gesagvoerder, hoof-navigasie-offisier en tweede navigasie-offisier van 'n skip of vreemde vaart, aanvaar word as kwalifikasies vir diens op Statebondskepe, moet elke kandidaat die eksaminator tevrede stel dat hy die Engelse taal goed genoeg kan praat en skryf om die pligte wat van hom aan boord vereis word, uit te voer.]

I. TWEDE NAVIGASIE-OFFISIER VAN 'N SKIP OP VREEMDE VAART.

Kandidate moet toon dat hulle hul werk verstaan deur sketse redelik akkuraat te kan teken. Antwoorde op probleme in praktiese navigasie moet, waar toepaslik, toegelig word met 'n skets wat min of meer volgens skaal geteken is.

In die vraestel oor praktiese navigasie kan daar van die totale korreksie van hoogtes deur middel van tafels gebruik gemaak word. In die vraestel oor „Beginsels van Navigasie” moet elke korreksie afsonderlik opgegee word.

Die vraestelle oor „Beginsels van Navigasie” en „Wiskunde” het ten doel om die kandidate se begrip te toets van die fundamentele tegniese idees en prosesse wat in sy werk ter see vereis word. Die matematiese bewys van formules word nie vereis nie.

(1) VRAESTEL 1. (SKRIFTELIK.)

ALGEMENE SKEEPSKENNIS. (Drie uur.)

(a) Die name van die vernaamste dele van 'n skip. Algemene idees oor skeepsbou. Die kandidaat moet toon dat hy prakties vertroud is met langs- en dwarspante, dwarsbalkke en balkknieë, waterdigte skotte, luikgate, roere en sturgerei, huidplate, dubbele bodems en kimme, skroefraam, skroef en skroefas, skroefaskoker, peilkoers, lugtype en algemene pompinrigting. Die verstywing en versterking om hyg en stamp te weerstaan. Oorsaak en voorkoming van korrosie in 'n skip se bouwerk.

(b) The meaning of the terms block coefficient, displacement and deadweight. 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.

(c) 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 plans. Ventilation systems of holds and tanks.

(d) 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, lights and sound signals.

(2) PAPER 2. (WRITTEN.)

CHARTWORK AND PILOTAGE. (Two hours.)

(a) 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.

(b) 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.

(c) The use of clearing marks and horizontal and vertical danger angles.

(d) 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.

(e) 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.

(3) PAPER 3. (WRITTEN.)

PRACTICAL NAVIGATION. (Three hours.)

(a) Practical problems on Plane, Parallel, and Mercator sailing.

(b) The use of the Traverse Tables to obtain the position of the ship at any time given compass courses 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.

(c) To find the latitude by Meridian Altitude of the Sun or a Star. Latitude by an observation of Polaris.

(d) From an observation of the Sun or Star near the meridian to find the position line and the latitude through which it passes corresponding to a given longitude.

(e) 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.

(f) 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.

(g) To find the True Bearing of a heavenly body and the deviation of the compass for the direction of ship's head.

(4) PAPER 4. (WRITTEN.)

MATHEMATICS. (Two hours.)

(a) *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. Co-ordinates. 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.

(b) *Common Logarithms*.—The practical use of logarithms to base 10; their use in simple calculations involving multiplication, division, simple powers and roots.

(c) *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.

(d) *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 semi-circle; angles subtended by any chord of a circle. Forces, resultant forces and their components. The vector diagram.

(e) *Trigonometry*.—Measurement of angles. Circular measure. Trigonometrical ratios 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.

(5) PAPER 5. (WRITTEN.)

PRINCIPLES OF NAVIGATION. (Two 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:—

(a) 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.

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

(c) 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 First Magnitude by reference to the Principal Constellations.

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

(b) Die betekenis van die terme blokkoeffisiënt, verplasing en ladingsgewig. Gebruik van verplasing- en ton per duim-skale om die gewigte van vrag, ens., volgens diepgangmerke te bereken. Uitwerking van digtheid van wafer op diepgang. Toegee vir soetwater. Die wette met betrekking tot drywende liggame. Die betekenis van die terme dryfvermoë en reserwedryfvermoë. Algemene begrip van swaartepunt en drukingspunt en die uitwerking daarop wanneer gewigte bygevoeg of weggeëem word. Metasenterhoogte. Die gevaar van gedeeltelik gevulde ballastens.

(c) Optuiging van 'n skip vir die laai en aflaai van vrag en die gebruik van laaibome en wenasse. Die stuwings en garnering van vragte, met inbegrip van stortvragte. Beskerming teen beskadiging weens sweet. Stortolievrage. Berekening van ruimte deur gedeceltelike vrage ingeneem en van oorblywende ruimte. Herleiding van gewigsmaat van vrag tot ruimtemaat, en omgekeer. Elementêre idees oor die opstelling en gebruik van vragplanne. Ventilasiestelsels van ruime en tenks.

(d) Die name en funksies van die verskillende dele van 'n skip se reddingsboot. Die verskillende tipes konstruksie. Draagvermoë, dryfvermoë en aantal opvarendes. Versorging en onderhoud van reddingsbootuitrusting, reddingsboei, reddingsbaadjies, lynwerptoeë, ligte en geluidseine.

(2) VRAESTEL 2. (SKRIFTELIK.)

KAARTWERK EN LOODSKUNS. (Twee uur.)

(a) As die variasie en 'n afwykingstabel gegee word, herlei ware koerse tot magnetiese en kompaskoerse, en omgekeer. Bepaal die kompaskoers en afstand tussen twee posisies. Die uitwerking van stroom op snelheid. Toegee vir drif. As die kompaskoers wat gestuur word, die snelheid van die skip en die rigting en sterkte van die stroom gegee word, bepaal die behoue ware koers. Bepaal die koers wat gestuur moet word, met toegee vir 'n stroom.

(b) Bepaal die skip se posisie op 'n kaart deur middel van gelyktydige kruispeilings, ligging en vaarlengte, of met behulp van radio-kruispeilings en bring die nodige korreksies aan. Bepaal die skip se posisie deur middel van peilings van een of meer voorwerpe met die meetvaart daartussen, met toegee vir 'n stroom en bereken die afstand waarop die skip by 'n gegewe punt sal verbyvaar. Bepaal die skip se posisie deur middel van horisontale sekstanthoeke.

(c) Die gebruik van veiligheidsmerke en horisontale en vertikale gevaarhoeke.

(d) Bepaal die tyd en hoogte van hoog- en laagwater by 'n standaardhawe (getyafels van die Admiraliteit). Die gebruik van tafels of 'n diagram om die hoogte van die gety op enige gegewe tyd te bepaal en, daarvolgens, die benaderde korreksie wat in dieptepeilings of in die kaarthoogtes van voorwerpe aan wal aangebring moet word.

(e) Kandidate sal 'n mondelinge toets moet aflê oor die gegewens wat op 'n kaart of plan voorkom, veral oor boei, ligte, dieptes en gesteldheid van die seebodem, hoogtelyste getye en getystrome. Bekenning van die kus. Die intelligente gebruik van vaaraanwysings. Kaartkorreksie.

(3) VRAESTEL 3. (SKRIFTELIK.)

PRAKTIESE NAVIGASIE. (Drie uur.)

(a) Praktiese probleme oor platkaart-, parallel- en Mercatornavigasie.

(b) Die gebruik van die koppelkoerstafels om die posisie van die skip op enige tyd te bepaal as die kompaskoerse en -foute en die meetvaart soos in die skeepsjoernaal aangeteken of volgens die tyd bereken en die berekende snelheid gegee word, met toegee vir die uitwerking van wind en stroom, as daar is.

(c) Bepaal die breedte volgens die meridiaanshoogte van die son of 'n ster. Breedte volgens 'n poolsterwaarneming.

(d) Volgens 'n waarneming van die son of 'n ster naby die meridiaan, bepaal die standlyn en die breedte waardeur dit loop in ooreenstemming met 'n gegewe lengte.

(e) Bepaal die standlyn en 'n posisie waardeur dit loop volgens 'n waarneming van die son of 'n ster buite die meridiaan.

(f) Bepaal die skip se posisie ten tyde van die tweede waarneming met behulp van standlyne verkry met twee verskillende waarnemings en, daarvolgens, die middagbestek, indien nodig.

(g) Bepaal die ware peiling van 'n hemelliggaam en die kompasafwyking vir die boegrigting.

(4) VRAESTEL 4. (SKRIFTELIK.)

WISKUNDE. (Twee uur.)

(a) *Algebra*.—Optel, aftrek, vermenigvuldiging, deling, eksponentwet, invoeging en verwydering van hakies. Eenvoudige vergelykings—probleme. Ontwikkeling van formules, transposisie en berekening. Gelyktydige vergelykings van die eerste orde met twee onbekendes—probleme. Eenvoudige faktore. Breuke. Die oplossing van die vierkantsvergelyking. Grafieke. Asse. Koördinate. Konstruksie en vertolking van grafiese diagramme, bv. weerstatistieke en verplasingsskrommes. Probleme oor grafieke. Die begrippe verhouding, eweredigheid en variasie en die toepassing daarvan op eenvoudige probleme.

(b) *Gewone logaritmes*.—Die praktiese aanwending van logaritmes tot grondtal 10; die toepassing daarvan in eenvoudige berekenings waarby betrokke is vermenigvuldiging, deling, eenvoudige magte en wortels.

(c) *Oppervlakte- en volumeberekening*.—Die oppervlakte en omtrek van die reghoek, driehoek en sirkel. Die volume en oppervlakte van die oppervlak van kasvormige liggame, silinders, wigge en bolle. Praktiese toepassing, bv. die gewig van algemene vrage van verskillende vorms; die volume van ruime, bunkers en tenks; gewig van inhoud.

(d) *Praktiese Meetkunde*.—Die konstruksie van plat driehoeke. Kongruensie van driehoeke. Die reghoekige driehoek. Buitehoek is gelyk aan die som van die teenoorstaande binnehoeke. Som van hoeke in 'n driehoek. Gelykvormige driehoeke en verhouding van ooreenkomstige sye. Ewewydige lyne en die transversaal. Eienskappe van sirkels, koorde en tangense. Hoek in 'n semisirkel; hoeke onderspan deur enige koorde van 'n sirkel. Kragte, resulterende kragte en hulle komponente. Die vektordiagram.

(e) *Driehoeksmeting*.—Meting van hoeke. Boogmaat. Trigonometriese verhoudings tot een volledige omwenteling. Halwesinus. Eenvoudige betrekking tussen verhoudings. Komplimentêre en supplementêre hoeke en hulle verhoudings. Eenvoudige identiteite. Oplossing van reghoekige en skeefhoeke driehoeke, met inbegrip van praktiese probleme wat daarop gebaseer is. Die gebruik van koppelkoerstafels vir die oplossing van reghoekige driehoeke. Elementêre eienskappe van boldriehoeke. Oplossing van boldriehoeke (as drie sye of twee sye en die ingeslote hoek gegee word). Oplossing van reghoekige en reghoekige boldriehoeke.

(5) VRAESTEL 5. (SKRIFTELIK.)

BEGINSELS VAN NAVIGASIE. (Twee uur.)

In hierdie vraestel kan kandidaat gevra word om 'n figuur redelik volgens skaal te teken en te meld watter projeksie gebruik is. Kandidaat moet 'n goeie algemene begrip hê van die volgende:

(a) Die vorm van die aarde. Pole. Ewenaar. Meridiaan. Breedtesirkels. Die ligging van 'n plek volgens die lengte- en breedtegraad daarvan bepaal. Rigting, ligging, afstand, maateenhede. Breedteverskil, lengteverskil, afwyking, middelbreedte en meridiaans breedteverskil en die verhouding daartussen. Groot- en kleinsirkels op 'n bol. Kortste afstand tussen twee punte op die oppervlakte van 'n bol.

(b) Die hemelbol, hemelpole, hemelmeridiaan bo en onder pole, hemeleewenaar, hemelhorison, senit, hoofvertikaalvlak, hoogte-sirkels.

(c) Sonnestelsel. Die beweging van die aarde en ander hemelliggame. Middelbare son. Ekliptika. Eerste punt van die Ram. Deklinasie. Regte klimming. Asimut. Opkoms en ondergang van hemelliggame. Dag- en naglengte. Skemering. Die posisie van 'n hemelliggaam op die hemelbol, sowel met as sonder verwysing na die waarnemer, d.w.s. asimut met hoogte of deklinasie met regte klimming. Herkenning van sterre van die grootste helderheid met verwysing na die hoofsterbeelde.

(d) Tyd, Greenwich- en ander standaardtye. Middelbare tyd. Skynbare tyd. Sterretyd. Tydvereffening. Verhouding tussen lengte en tyd.

- (e) 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.
- (f) Correction of Sextant Altitudes. Dip, Refraction, Horizontal Parallax, Parallax in Altitude, Semi Diameter and augmentation.
- (g) Geographical position of a heavenly body. A circle of position on the earth and its practical application, i.e. position line. Intercept.
- (h) Magnetic Meridian. Variation and Deviation.
- (i) The simple properties of a Mercator Chart. Longitude and Latitude scales. The measurement of distance. Rhumb Lines. Meridional Parts.
- (j) Chronometers. Management and care, winding, rating and comparing.

(6) PAPER 6. (WRITTEN.)

LANGUAGE. (One-and-a-half hours.)

The paper will be designed to test the candidate's ability to write one of the official languages of the Union clearly and grammatically with due attention to spelling, legibility and neatness. It will be in no sense a test of technical knowledge. This paper may consist of an essay, a precis or an exercise in letter writing.

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 and 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 life-saving 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 recognise 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 United Kingdom Ministry of Transport and Civil Aviation Book of Merchant Shipping Notices and the use of South African and 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.
 7. 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.
- Signals.—To send and receive signals in:—
- (a) Semaphore up to eight words per minute.
 - (b) Morse Code by flash lamp up to six words per minute.
 - (c) International Code of Signals.

II. CHIEF NAVIGATING OFFICER OF A FOREIGN-GOING SHIP.

(I) PAPER 1. (WRITTEN.)

PRACTICAL NAVIGATION. (Three hours.)

This paper may include questions on the syllabus for Second Navigating Officer.
The term "heavenly body" includes Moon and Planets.

- (a) 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.
- (b) 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.
- (c) To obtain the ship's position by the combination of any two observations with or without run.
- (d) 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.

- (e) Uurhoek van 'n hemelligaam in tyd en in 'n sirkelboog. Greenwich-uurhoek van die son, maan, planete en die Ram. Sterre-uurhoek van 'n ster.
- (f) Korreksie van sekstanthoogtes. Duiking, breking, horisontale parallaks, hoogteparallaks, halwe middellyn en vergroting.
- (g) Geografiese posisie van 'n hemelligaam. 'n Hoogtesirkel op die aarde en die praktiese toepassing daarvan, d.w.s. standlyn. Hoogteverskil.
- (h) Magnetiese meridiaan. Variasie en deviasie.
- (i) Die eenvoudige eienskappe van 'n Mercatorkaart. Lengte-en-breedteskale. Die meting van afstand. Loksodrome. Meridiaanstukke.
- (j) Chronometers. Hantering en versorging, opwen, ontwerpvermoë, en vergelyking.

(6) VRAESTEL 6. (SKRYFTELIK.)

TAAL. (Een en 'n half uur.)

Die vraestel sal opgestel word as 'n toets van die kandidaat se vermoë om een van die amptelike tale van die Unie duidelik en grammatikaal korrek te skryf, met behoorlike aandag aan spelling, leesbaarheid en netheid. Dit sal geensins 'n toets van tegniese kennis wees nie. Hierdie vraestel kan bestaan uit 'n opstel, 'n précis of 'n briëfskryfoefening.

MONDELING EN PRAKTIËS.

1. (a) Optuiging van skepe. Sterkte van toue, insluitende staaltoue. Verskillende soorte kragtakels en kennis van kragwins met takelstelle. Knoop en splits, met strenge inagneming van die huidige praktyk. Bindels; oorkruisbindels; kettingstoppers, ens.
- (b) Die op- en neerhaal van marsstenge.
- (c) Die aanslaan, span en mindering van reddingsbootseile. Hantering van bote wat geroei word of onder seil vaar en in onstuimige weer. Laat strand of land. Langsaan kom.
- (d) Roerbevele. Leiding van die skip. Uitwerking van skroewe op die stuur van 'n skip. Hoe 'n skip tot stilstand gebring, agteruit laat vaar en gemanoevreer word. Hoe om 'n stoomboot kortom te laat draai. Noodmanoeuvres. Man oorboord.
2. (a) Merk en gebruik van gewone loodlyn.
- (b) Gebruik en versorging van werktuigkundige logs en dieptepciltoestelle.
- (c) Gebruik en versorging van masjienkamer- en ander telegrawe.
- (d) Vuurpyl- en lynwerpers.
3. (a) Ankers en kables en die gebruik en stuwung daarvan. Hoe om 'n skip in 'n noodgeval voor 'n enkele anker te bring.
- (b) Kennis van die gebruik en onderhoud van dekwerktuie en stuurgerei.
- (c) Die gebruik van reddingsgereedskap.
- (d) Die gebruik van brandblustoestelle met inbegrip van die rookhelm.
4. (a) Voorbereidings om te begin vaar. Wat gedoen moet word voordat die skip uitvaar, 'n hawe binnevaar en 'n dok binnekom. Aanlê en vasmaak aan 'n boei, met besondere verwysing na die agterent van 'n skip.
- (b) Die hou van ankerwag. Sleepanker.
- (c) Pligte van offisier van die wag. Gebruik van kompas om die gevaar van aanvaring vas te stel.
5. (a) Deeglike kennis van die inhoud en toepassing van die regulasies vir die voorkoming van botsings op see. (Kandidate sal nie in die posisie gestel word om 'n seilskip te hanteer nie, maar moet 'n seilskip se ligte kan uitken en moet kennis dra van die moontlike manoeuvres daarvan volgens die rigting van die wind.
- (b) Nood- en loodsseine; strawwe vir misbruik.
- (c) Britse eenvormige stelsel van beboeiing; wrakmerkstelsel.
- (d) Kennis van die inhoud van die „United Kingdom Ministry of Transport and Civil Aviation Book of Merchant Shipping Notices” en die gebruik van Suid-Afrikaanse Kennisgewings aan Seeliede en „Admiralty Notices to Mariners”.
6. (a) Kandidate moet 'n barometer, termometer, hidrometer en higrometer kan lees en dit verstaan. (Die instrumente deur die Weerkantoor verskaf, sal as standaard geneem word.)
- (b) Die gebruik van 'n asimutspieël, pelorus (peilskyf) of ander instrument vir die maak van peilings.
- (c) Die gebruik van die sekstant vir die meting van vertikale en horisontale hoeke; kandidate moet 'n sekstant op en van die boog af kan lees.
- (d) Korrigeer 'n sekstant waarin daar een of meer loodregte stand-, sy- of indeksfoute aangebring is.
- (e) Bepaal die indeksfout van 'n sekstant.
- (f) Kandidate moet chronometers kan regstel volgens seine gestuur per gonser of ander metode; moet twee chronometers kan vergelyk.
7. Die eksaminator kan aan die kandidaat vrae stel oor die skriftelike werk indien hy dit nodig ag op grond van swak punte wat die kandidaat daarin aan die dag gelê het.
- Seine.—Kandidate moet seine kan stuur en ontvang in:
 - (a) Semafoor tot agt woorde per minuut.
 - (b) Morsekode met die flitslamp tot ses woorde per minuut.
 - (c) Die Internasionale Seinboek.

II. HOOF-NAVIGASIE-OFFISIER VAN 'N SKIP OP VREEMDE VAART.

(1) VRAESTEL 1. (SKRYFTELIK.)

PRAKTIËSE NAVIGASIE. (Drie uur.)

Hierdie vraestel kan vrae oor die leerplan vir tweede navigasie-offisier insluit. Die term „hemelligaam” omvat ook die maan en planete.

Kandidate moet:—

- (a) By benadering die tyd (tot die naaste minuut) bereken waarop 'n hemelligaam deur die meridiaan gaan; by benadering 'n hoogte bereken waarop die sekstant gestel moet word om die meridiaanshoogte van 'n hemelligaam te verkry; die breedtegraad volgens die meridiaanshoogte van 'n hemelligaam kan bepaal.
- (b) Die rigting van die standlyn en 'n posisie waardeur dit loop volgens 'n waarneming van 'n hemelligaam naby of buite die meridiaan kan bepaal.
- (c) Die skip se posisie deur middel van enige twee waarnemings saam met of sonder die meetvaart kan verkry.
- (d) Die aanvangskoers en die afstand op 'n grootsirkel- of samegestelde grootsirkelbaan tussen twee posisies kan bereken en een of meer posisies op die baan kan bepaal.

(2) PAPER 2. (WRITTEN.)

CHART WORK AND PILOTAGE. (Two hours.)

In addition to the syllabus for Second Navigating Officer questions on the following may be asked either in the written or oral parts of this paper:—

- (a) Distance of sighting lights, distance from a point of land of known height.
- (b) Construction and use of a line of soundings. The use of a single position line in approaching the coast. The use of wireless beacons.
- (c) To find the times and heights of high and low water at a Secondary Port (Admiralty Tide Tables) by the use of Tidal Differences.
- (d) Candidates will be examined orally on the reliability of charts. Selection of suitable points for bearings. Approaching an anchorage and entering narrow waters. Landfalls in thick and clear weather.
- (e) 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.

(3) PAPER 3. (WRITTEN.)

SHIP CONSTRUCTION AND STABILITY. (Three hours.)

(a) 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.

(b) 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.

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

(d) 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-eighths Rule.

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

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

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

(4) PAPER 4. (WRITTEN.)

METEOROLOGY. (Two hours.)

(a) 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.

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

(c) The principle and use of the hydrometer.

(d) 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.

(e) 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.

(f) 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.

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

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

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

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

(5) PAPER 5. (WRITTEN.)

SHIP MAINTENANCE, ROUTINE AND CARGO WORK. (Three hours.)

(a) Keeping a ship's log (Deck log).

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

(c) 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.

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

(e) Indents and stores. Repair lists.

(f) 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.

(g) Use and maintenance of cargo working gear and the organisation of cargo work. A knowledge of the regulations made under paragraph (xxxii) of sub-section (1) of section 356 of the Merchant Shipping Act, 1951. 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—its cause and prevention.

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

(2) VRAESTEL 2. (SKRIFTELIK.)

KAARTWERK EN LOODSKUNS. (Twee uur.)

Bo en behalwe die leerplan vir tweede navigasie-offisier kan vrae oor die volgende of in die skriftelike of in die mondelinge deel van hierdie vraestel gestel word.

- (a) Afstand van rigligte, afstand vanaf 'n landpunt van bekende hoogte.
- (b) Samestelling en aanwending van 'n reeks dieptepeilings. Die gebruik van 'n enkele standlyn wanneer die kus genader word. Die gebruik van radiobakens.
- (c) Bepaal die tye en hoogte van hoog- en laagwater by 'n sekondêre hawe (getyafels van die Admiraliteit) deur gebruik te maak van getyverskille.
- (d) Kandidate sal 'n mondelinge toets oor die betroubaarheid van kaarte moet aflê. Uitkies van geskikte punte vir peilings. Nadering van 'n ankerplek en die binnevaar van smal waters. Landbekenning in dik en mooiweer.
- (e) Die kandidaat kan mondeling of prakties getoets word in die gebruik van 'n gnomoniese kaart en die oorbring van 'n grootsirkel- of samegestelde grootsirkelbaan van so 'n kaart af op 'n Mercatorkaart, asook in die gebruik van tralickaarte.

(3) VRAESTEL 3. (SKRIFTELIK.)

SKEEPSBOU EN STABILITEIT. (Drie uur.)

(a) Algemene kennis van die vernaamste boudele van 'n skip. Die regte name van die verskillende dele. Midskeepse deursnee van enkeldek-, tussendek- en skuildekskepe en stortolietenskepe. Funksies, bou en verstywing van waterdigte skotte, met inbegrip van die aanvaringskot. Skroefraam en voorstewe en hoe dit bevestig word. Roere en hoe hulle bevestig word. Bou, verstywing en sluitinrigtings van luikgate. Kluispype en hoe hulle bevestig word. Klinknaels en klinkwerk. Die toets van 'n ry klinknaels. Die toets van tenks en ander waterdigte werk.

(b) Spanning en vervorming in skepe in 'n seegang of as gevolg van lading en ballas. Kennis van die dele van 'n skip wat spesiaal versterk word om sulke spannings te weerstaan, of waar beskadiging weens strawwe korrosie maklik plaasvind.

(c) Die vermoë om 'n verslag oor skade gedurende 'n seevaart opgedoen, duidelik op te stel.

(d) Dryfvermoë en reserwedryfvermoë. Die regbringkoppel wanneer 'n uitwendige krag 'n skip laat oorhel. Dwars- en langsmeta-senters. Metasenterhoogte. Aanvangstabiliteit en die beperking daarvan tot klein neigings. Die berekening van oppervlaktes met behulp van die Eerste en Tweede Reël van Simpson en die reël van vyf-agt.

(e) Bepaling van die swaartepunt van 'n skip in 'n nuwe toestand as die swaartepunt in die ou toestand gegee word. Uitwerking op die swaartepuntsligging wanneer gewig bygevoeg, verwyder of verskuif word. Stywe en rank skepe. Verandering in stabiliteit gedurende 'n seevaart. Uitwerking van 'n verskuiwing van vrag op soliede ballas. Die gevaar van „vrye oppervlakte” van vloeiistowwe (sonder bewyse of berekenings).

(f) Verandering van trim (as die M.T.V. 1" en D.V.P. gegee word.)

(g) Gebruik van stabiliteitskrommes en -gegewens wat aan 'n skip verskaf word.

(4) VRAESTEL 4. (SKRIFTELIK.)

WEERKUNDE. (Twee uur.)

(a) Die beginsels van die kwik- en Aneroidbarometer. Skeepswikbarometer. Hoe om die stande te lees en tot standaardgegewens te herlei. Die gebruik van die Gold-skuif. Barograaf.

(b) Die beginsels van die termometer en die higrometer en hulle gebruike ter see.

(c) Die beginsel en gebruik van die hidrometer.

(d) Kennis van die verspreiding van gemiddelde druk en die heersende winde en stroomstelsels van die aardbol. Verhouding tussen drukverspreiding en wind. Die wet van Buys Ballot.

(e) Die eienskappe van en weer wat gepaard gaan met die vernaamste drukstelsels bv. antisiklone, laagdrukgebiede. Permanente en halfpermanente antisiklone en laagdrukgebiede en die uitwerking daarvan, bv. passaatwinde, moesonwinde.

(f) Tropiese werwelstorms, waar hulle voorkom, in watter seisoene en waarlangs hulle trek. Reëls vir die vermyding van tropiese storms. Gebruik van barometriesse waarnemings by 'n enkele stasie saam met weertekens.

(g) Waterdamp in die atmosfeer, verdamping, kondensasie, neerslag, betekenis van versadiging, relatiewe vogtigheid, vorming van wolke, mis en newel.

(h) Styg- en daalwinde. Land- en seebriese.

(i) Die Beaufortskaal en -weerskrif in gebruik ter see. Metodes om die rigting en krag van die wind ter see te bepaal.

(j) Kennis van die tipes weerberigte deur die Internasionale Weerkundige Organisasie aanvaar en wat vir die skeepvaart beskikbaar is. Die kodering en dekodering van berigte wat in Dele V en VI van Weerberigte vir die Skeepsvaart vervat is.

(5) VRAESTEL 5. (SKRIFTELIK.)

SKEEPSONDERHOUD, ROETINE- EN VRAGWERK. (Drie uur.)

(a) Die hou van 'n skeepsjoernaal (dekjoernaal).

(b) Organisasie van die bemanning vir roetine-, onderhouds- en nooddiens.

(c) Inspeksie en onderhoud van die skip en sy uitrusting, bv. skotte, dubbele bodems, dieptenks, kimme, pypleidings, sifkaste, roer, ankers en kabels en stuurgerei. Dreinerings van ruime en tenks. Droogdokroetine.

(d) Bestanddele en gebruike van verwe en ander beskermende bedekking. Afbik- en skilderwerk. Behandeling van houtwerk. Sementwerk.

(e) Bestellings en voorrade. Herstellyste.

(f) Eenvoudige berekening van die spannings in spantoue, laaibome, hangers, ens. Sterkte van toue, staaltoue en kettings. Verskillende soorte toue, staaltoue, slingers en hulle gebruike. Takelstelle en kragwins.

(g) Gebruik en onderhoud van vraggereedskap en die organisasie van vragwerk. Kennis van die regulasies opgestel kragtens paragraaf (xxxii) van subartikel (1) van artikel 356 van die Wet op Handelskeepvaart, 1951 en hantering van vrag, bv. garnering, belugting en slingering. Die vervoer van spesiale vragte soos verkoelde vragte, staalstawe, vloeiistowwe in massa, dekvragte en dekvragte hout, stortstuwings. Die gebruik van grevelingskotte. Skeiding. Voorsorgsmaatreëls wat met soliede ballas getref moet word. Belugting van verskillende soorte vrag. Sweet—die oorsaak en voorkoming daarvan.

(h) As 'n vraglys gegee word, stu vrag in 'n ruim of ruime, maak 'n ruwe stuwingsplan met inagneming van stabiliteit, gedrag van skip in 'n seegang, beskadiging en bederf van vrag en toeganklikheid by opsionele lossingshawens.

(6) PAPER 6. (WRITTEN.)

ELEMENTARY MAGNETISM, ELECTRICITY AND THE GYRO COMPASS. (Two 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 of 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 ships 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. Condensor 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.

(7) 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 lessen her lee drift.

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

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 set forth in paragraph 5 (a) of the syllabus for the oral and practical examination of Second Navigating Officer.

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.

(8) SIGNALS.

1. To send and receive signals in:—

(a) Semaphore up to eight words per minute.

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

(c) International Code of Signals.

2. The practical use of shipborne Radio D/F.

III. MASTER OF A FOREIGN-GOING SHIP.

(1) PAPER 1. (WRITTEN.)

PRACTICAL NAVIGATION. (Three hours.)

(a) A short recapitulation paper in Navigation on the syllabus for Second Navigating Officer and Chief Navigating Officer which may include chart work and pilotage.

(b) The Admiralty Method of Tidal Productions and the use of Harmonic Constants. (Admiralty Tide Tables.)

(2) PAPER 2. (WRITTEN.)

MAGNETIC AND GYRO COMPASS. (Three hours.)

A more detailed knowledge of the elementary principles of Magnetism than is required for Chief Navigating Officer.

(a) 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.

(b) 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 observations taken in two widely separated Magnetic Latitudes.

(6) VRAESTEL 6. (SKRIFTELIK.)

ELEMENTERE MAGNETISME, ELEKTRISITEIT EN DIE GIROKOMPAS. (Twee uur.)

1. (a) 'n Eenvoudige magneet. Die pole van 'n magneet. Die wet van aantrekking en afstoting. Die molekulêre teorie van magnetisme soos van toepassing op ferro-magnetiese materiale. Die begrippe magneties „harde” en „sagte” yster. Die vorm van die magnetiese veld rondom 'n magneet. Die betekenis van die terme magnetisasie, magnetiese gevoeligheid en permeabiliteit. (Geen wiskundige formules sal vereis word nie.)

(b) Die magnetiese veld van die aarde. Die magnetiese pole van die aarde. Magnetiese ewenaar. Die totale magnetiese veldsterkte van die aarde. Inklinasiehoek. Horisontale en vertikale komponente. Magnetiese variasie. (Geen wiskundige formules sal vereis word nie.)

(c) Uitwerking wanneer 'n kompasnaald in die horisontale vlak gedwing word. Uitwerking wanneer 'n steurende krag naby 'n kompasnaald gebring word.

(d) Die versorging en onderhoud van verskillende tipes skepskompassse.

2. *Elektrisiteit*.—(a) 'n Eenvoudige begrip van die elektroneleer. Stroom, potensiaalverskil, weerstand en hulle eenhede. Die Wet van Ohm. Uitwerking van 'n elektriese stroom:

(i) Warmtewerking. Krag. Die elektriese eenheid;

(ii) Chemiese werking. Eenvoudige selle, primêre en sekondêre;

(iii) Magnetiese werking. Magnetiese veld wat ontstaan as gevolg van 'n stroom. Magnetiese veld van 'n stroomvoerende solenoïed en die uitwerking daarvan wanneer 'n ferro-magnetiese materiaal in so 'n veld ingebring word. Magnetostriksie.

(b) Die elektriese motor. Meetinstrumente—draaispoel en sagte ysterinstrument. Elektromagnetiese induksie. Beweging van 'n geleier in 'n veld. Variasie in grootte van 'n veld. Uitwerking van sluiting en verbreking van 'n stroom. Induksiespoel. Induktansie-eenheid. Dinamobeginsel—eenvoudige kommutator.

(c) Elektrostatiese veld. Kapasiteitseenheid. Kondensator.

(d) Sekerings, skakelaars en eenvoudige elektriese stroomkringse in 'n skip. Gebruik van meetinstrumente. Hoe stroom en stroomspanning gemeet word.

(e) Vernaamste simbole wat in diagramme gebruik word.

3. *Girokompas*.—Eenvoudige nie-matematiese behandeling van die volgende: Die beginsel van die vrydraende girokoop. Die uitwerking van die aarde se draaiing. Helling en drif. Presessie. Swaartebeheer. Demping.

(7) MONDELING.

1. (a) Verskuiwing van groot sparre en takelbokke.

(b) Die hantering van swaar gewigte met besondere verwysing na die sterkte van gereedskap wat gebruik word.

(c) Die gebruik en versorging van alle dek- en boedgereedskap en -toebehore—wene, kaapstanders, wenasse, noodstuurgerei en toebehore wat tussen die anker en die kettingbak gebruik word. Die ophaal van bote.

2. Ankers—verskillende soorte; voor- en nadele van elk. Kabels en die versorging daarvan. Voorbereidings vir ankering. Ankering met 'n enkele anker en gebruik van 'n tweede anker. Klaring van 'n onklaar anker. Mering. Klaring van 'n onklaar kluispyp. Ankering in 'n stroomstreek en in 'n beperkte ruimte. Laat slip van 'n kabel. Die uitbring van 'n anker met bote. Begin vaar.

(a) Aanlê langs 'n kaai, ens. Maneuvrering in riviere en hawens. Uitwerking van stroom, wind, vlak water en diepgang op maneuvrering.

(b) Hantering van stoomskepe in stormagtige weer. Metodes wat aangewend moet word om 'n ontredderde of onbestuurbare skip uit die golfdal te hou en die lydrif daarvan te verminder.

(c) Die dieplood uitgooi.

4. (a) Algemene kennis van die regulasies met betrekking tot reddingsgereedskap.

(b) Ongelukke, bv. aanvaring, aan die grond vasloop, ongelukke aan luke, lekplekke, brande en wat dan gedoen moet word. Handherstelwerk. Hantering van 'n ontredderde skip.

(c) Praktiese kennis van die afskerming van 'n skip se navigasieligte.

(d) Voorbereidings vir die inbring in en uitneem uit 'n droogdok. Gebruik van stutte, kimblokke en kimstutte.

5. Regulasies vir die voorkoming van botsings op see, ens., soos in paragraaf 5 (a) van die leerplan vir die mondelinge en praktiese eksamen vir Tweede Navigasie-offisier uiteengesit.

6. Die eksaminator kan aan die kandidaat vrae stel oor die skriftelike werk indien hy dit nodig ag op grond van swak punte wat die kandidaat daarin aan die dag gelê het.

(8) SEINE.

1. Kandidate moet seine kan stuur en ontvang in:—

(a) Semafoor tot agt woorde per minuut.

(b) Morsekode met die flitslamp tot ses woorde per minuut.

(c) Die Internasionale Seinkode.

2. Die praktiese gebruik van die skepsradiorigtingsoeker.

III. GESAGVOERDER VAN 'N SKIP OP VREEMDE VAART.

(1) VRAESTEL 1. (SKRIFTELIK.)

PRAKTIESE NAVIGASIE. (Drie uur.)

(a) 'n Kort opknappingsvraestel in Navigasie oor die leerplan vir Tweede Navigasie-offisier en Hoof-navigasie-offisier wat kaartwerk en loodskuns kan insluit.

(b) Die Admiraliteitsmetode van getyberekening en die gebruik van harmoniese konstante. (Getytafels van die Admiraliteit.)

(2) VRAESTEL 2. (SKRIFTELIK.)

MAGNETIESE- EN GIROKOMPAS. (Drie uur.)

'n Grondiger kennis van die grondbeginsels van magnetisme as wat vir hoof-navigasie-offisier vereis word.

(a) Die vierkantswet, eenvoudige probleme met eenheidspole. Die veldsterkte, magnetiese moment van 'n magneet, die periode van 'n hangende magneet wat in die aarde se veld vibreer.

(b) Die magnetiese kompas. Die metode waarvolgens die uitwerking van die skip se magnetiese veld op die magnetiese kompas deur middel van komponente bepaal en daarvoor gekompenseer word. Die benaderde koëffisiënte A, B, C, D en E en die gebruik daarvan. Toestande wat koëffisiënte A en E kan voortbring. Konstantes Lambda en Mu. Die skepsvermenigvuldiger. Metodes om 'n afwykings-tabel te verkry. Ontleding van 'n afwykings-tabel om benaderde koëffisiënte te verkry. Bepaling van die afwyking veroorsaak deur die skip se permanente magnetisme en/of geïnduseerde magnetisme in vertikale sagte yster deur middel van waarnemings gedoen in twee magnetiese breedtes ver van mekaar af.

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

The cause and effect of retentive magnetism and Gaussin error.

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

(d) Gyro Compass. A fuller knowledge of the theory than that required for Chief Navigating Officer, but mathematical proofs will not be required.

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 minimised.

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.

(3) PAPER 3. (WRITTEN.)

SHIP CONSTRUCTION AND STABILITY. (Three hours.)

(a) 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.

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

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

(d) 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.

(e) A fuller knowledge of Stability than is required for Chief Navigating Officer. 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.

(4) PAPER 4. (WRITTEN.)

SHIPMASTER'S BUSINESS. (Two hours.)

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

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

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

(c) Engagement, discharge and management of a ship's crew. Manning qualifications. Ship's Articles of Agreement. Wages and other remuneration. Discipline and treatment of offences. Fines and forfeiture. Deserters, deceased seamen, engagement of substitutes.

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

(e) Crew accommodation.

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

(g) Entering and Clearing ship.

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

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

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

(k) The meaning of the term "passenger ship".

(l) 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.

(m) 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.

(5) PAPER 5. (WRITTEN.)

ELEMENTARY ENGINEERING AND ELECTRICITY INCLUDING ELECTRONIC NAVIGATIONAL AIDS. (Three hours.)

1. *Engineering*.—(a) The meaning of the general engineering terms sensible heat, latent heat, saturated steam, superheated steam, work and power, horse-power, propeller pitch, slip.

(b) A simple knowledge of the following: 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, feed, 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. Tuned 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.

(c) Algemene beginsels van kompaskorreksie en die metode van korreksie vir koëffisiënte B, C en D.

Die oorsaak en uitwerking van remanente magnetisme en die Gaussfout.

Opstelling van kompas met besondere verwysing na die nabyheid van magnetiese materiaal en elektriese toestelle. Oorhelfout, die oorsaak en uitwerking daarvan en metode van korreksie. Die uitwerking van oorhelfoutmagnete op stelmagnete van sagte yster.

(d) Die Girokompas. 'n Breër kennis van die teorie daarvan as wat vereis word vir hoof-navigasie-offisier, maar matematiese bewyse sal nie vereis word nie.

Bo en behalwe bostaande, sal dit insluit: Koers- en snelheidsfout. Korreksie vir breedte. Ballistiese defleksie en die verhouding daarvan tot koers- en snelheidsfout. Rolfout en hoe dit verminder word. Die vernaamste dele van 'n girokompas en die herhaalstelsel. Die belangrikste fundamentele verskille in die bou van die bekendste tipes girokompassen en die metodes wat aangewend word om die vernaamste foute uit te skakel of daarvoor toe te gee.

(3) VRAESTEL 3. (SKRIFTELIK.)

SKEEPSBOU EN STABILITEIT. (Drie uur.)

(a) 'n Breër kennis van skeepsbou as wat vir sertifikate van laer grade vereis word. Die spantvloer en die gebruik daarvan. Die rigplaat en buigmetodes. Algemene bouwerk. Kiele, spante, voorstewe, skroefraam en roerpos, dwars- en langslers, deurlopende middelplate, kolsems en interkostale saathout, dubbele bodems, systringers, huidplate, skotte, dieptenks, dekstutte, skroefsteune, roere. Bobou. Maste en laaibome.

(b) Tipes vaartue, bv. algemene koopvaarders en stortolietenkskepe. Sterkte en bou in verhouding tot die doel waarvoor hulle gebruik word.

(c) Klassifikasie van skepe. Opnames. Algemene idees van tonnemaatmeting. Vryboord en 'n algemene begrip van toewysingsvoorwaardes.

(d) Onmiddellike afhandeling van ongelukskade—aanvaring, slegte weer, stranding. Algemene idees oor sweiswerk by die herstel van skepe. Opstelling van eenvoudige spesifikasies. Die reëling van eenvoudige herstelwerk.

(e) 'n Grondiger kennis van stabiliteit as wat vir hoof-navigasie-offisier vereis word. Eenvoudige berekenings met volumes, momente en die uitwerking van vrye oppervlakte van vloeiwater. (Bewyse van formules nie nodig nie.) Uitwerking wanneer kompartemente leeggepomp en oorstroom word. Deurdringbaarheid. Trim en moment van trimverandering. Stabiliteit en trim wanneer 'n skip aan die grond vasloop. Die hellingtoets. Invloed van dwarsbalk en vryboord op stabiliteit. Praktiese handelinge om die stabiliteit van 'n skip te verseker: Dekvragte, eensoortige vragte, hangende gewigte en vragte wat maklik kan skuif. Gevare van 'n skip met groot slagsy en voorsorgsmaatreëls by regbring. Hantering van ballastens. Ballasvulling.

(4) VRAESTEL 4. (SKRIFTELIK.)

KAPTEINSPILIGE. (Twee uur.)

(Die regskennis wat vereis word, is binne die omvang van die Wette op Handelskeepvaart en die handelsreg wat 'n kaptein moet ken om die sake van 'n skip behoorlik te kan bestuur.)

(a) Registrasie van skepe. Die registrasiesertifikaat en die regsbetekenis daarvan.

(b) Sertifikate en ander dokumente wat aan boord gevoer moet word, hoe hulle verkry word en hoe lank hulle regsgeldig bly. Suez- en Panamakanaalsertifikaat.

(c) Indiënsneming, ontslag en beheer van 'n skip se bemanning. Bemannings-kwalifikasies. Skeepskontrak. Lone en ander besoldiging. Nasionale assurancebydraes. Dissipline en afhandeling van misdrywe. Boetes en verbeurings. Drosters, oorlede seemanne, indiënsneming van plaasvervangers.

(d) Die amptelike skeepsjoernaal en die wet met betrekking tot inskrywings.

(e) Akkommodasie vir die bemanning.

(f) Skeepshigiëne en sindelikeit in woonruimtes, ruime, ens. Water. Vars en ingemaakte voedsel. Prosedure aan boord in die geval van besmetlike siekte, siekte of ongeluk. Kwarantynprosedure. Beroeking.

(g) Inklaring en uitklaring van 'n skip.

(h) Laslynmerke en die algemene en seisoensgebruik daarvan. Inskrywings wat gemaak en verslae wat opgestel moet word ten opsigte van vryboord en diepgang.

(i) Die veiligheid van die skip, bemanning en passasiers. Hulp aan skepe in nood, en berging. Pligte in geval van aanvaring en ongeluk.

(j) Die wet met betrekking tot die aanmelding van ys en verlate skepe. Verpligte en nie-verpligte loodsing.

(k) Die betekenis van die term „passasierskip”.

(l) Algemene kennis van skeepvaartpraktiek en -dokumente veral met betrekking tot geskrewe huurkontrakte, vragbriewe, en 'n goeie begrip van die vernaamste klousules daarvan, bv. vrag, afwyking, altyd vlot, ys, los-en-laadae, oorlêg, versending. Besware. Sertifikate van seewaardigheid. Eenvoudige kennis van die wet betreffende die vervoer van vrag en die skeepsienaar se aanspreeklikheid en pligte.

(m) Kennis van die belangrikste klousules in 'n seeversekeringspolis. Die betekenis van awery. Partikuliere awery. Algemene awery. Prosedure in die geval van algemene awery. Prosedure by 'n vlughawe. Lloyds-agente.

(5) VRAESTEL 5. (SKRIFTELIK.)

ELEMENTÊRE INGENIEURSWISE EN ELEKTRISITEIT, MET INBEGRIIP VAN ELEKTRONIESE NAVIGASIEMIDDELS. (Drie uur.)

1. Ingenieurswese.—(a) Die betekenis van die algemene ingenieursterme meetbare warmte, latente warmte, versadigde stoom, oorverhitte stoom, arbeid en krag, perdekrag, skroefsteek, slip.

(b) Eenvoudige kennis van die volgende: Tipes skeepsketels, steenkool- en oliestookoonde; prosedure vir die ontwikkeling van stoom. Die werking van die suierstoommasjien, turbinemasjinerie en dieselmotore. Prosedure wanneer masjiene warm laat loop, laat proefdraai, aangesit, afgeskakel en omgestel word.

(c) Die gebruik van die kondenseer-, verdamp- en warmwaterbak. Gebruik van sirkulasie-, lug-, voedings-, vullings- en ballaspompe. Klepkaste.

(d) Brandstofverbruik en ekonomiese snelhede, beraming van minimum brandstofverbruik om 'n gegewe vaart te voltooi. Eenvoudige slipprobleme.

(e) Eenvoudige kennis van die tipes koelstelsels wat aan boord van skepe aangewend word.

2. Elektrisiteit.—(a) Die eenvoudige alternator. Wisselstroom, frekwensie, faseverhouding tussen twee wisselende hoeveelhede; uitwerking van induktansie, kapasiteit en weerstand. Resonansie. Ingestemde kringe. Die kragtransformator. Die eenvoudige telefoon en mikrofoon.

(b) R.F.-ossillasies. Uitstraling van elektromagnetiese golwe in die vrye ruimte—frekwensie, snelheid en golflengte en die verhouding daartussen. Ontvangs van elektromagnetiese golwe. Invloed van die ionosfeer—bodemgolf, ruimtegolf.

(c) Gloeikatodebuis. Warmte-uitstraling. Diodebuis—gebruik daarvan as gelykrichter. Triodebuis—gebruik daarvan as spanningsversterker, asook as 'n eenvoudige ossillator.

(d) Elektronestraalbuis—bou en werking; elektrostasiese en elektromagnetiese afbuiging. Die tydbasis soos toegepas op die elektronestraalbuis.

3. *Electronic Navigational 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 radio direction finding; rotating loop and goniometer systems. Maximum and minimum signals; sense. Quadrantal error. Calibration. Sunset and sunrise effects. Land effects.

A general knowledge of shore-based radio directional systems.

(d) The general principles of echo sounding. Methods of transmission. Timing device. The receiver. Methods of recording. Reliability of indications.

(6) PAPER 6. (WRITTEN.)

METEOROLOGY.

(hours.)

In addition to the syllabus for Chief Navigating Officers:—

(a) The principal cloud types.

(b) Simple ideas of air masses and fronts.

(c) Adiabatic changes in the atmosphere. Stability and instability.

(d) The frontal theory of the formation of depressions.

(e) 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.

(f) To decode groups as given in the international analysis code (Part IV), Weather Messages for Shipping, and draw the weather map.

(g) The use of a synoptic chart or weather map for deducing the probable weather and anticipated changes at a specified point or points.

(h) The main types of floating ice and their origin. General ideas of distribution and seasonal movements. Navigation in the vicinity of ice.

(i) General points to consider in the selection of ocean routes.

(7) 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. Beaching 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 and/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 organisation of 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.

2. Regulations for preventing collisions at sea, etc., as set forth in paragraph 5 (a) of the syllabus for the oral and practical examination of Second Navigating Officer.

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.

(8) SIGNALS.

To send and receive signals in:—

(a) Semaphore up to eight words per minute.

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

(c) International Code of Signals.

IV. NAVIGATING OFFICER OF A COASTING SHIP OF ONE HUNDRED OR MORE GROSS REGISTER TONS.

(1) PAPER 1. (WRITTEN.)

CHART WORK AND PILOTAGE. (Two hours.)

(a) 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. To find the compass course to steer allowing for a current. Given compass course steered, the speed of the ship and the direction and rate of the current to find the true course made good.

(b) 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. The construction of a line of soundings. The use of a single position line approaching the coast.

3. *Elektroniese Navigasiemiddels.*—(a) Eenvoudige kennis van hoe radar werk. Vertonings, onderskeiding tussen afstand en peiling, kalibrering, afstandmerkers, saamkyk, parasieteggo's, sylobeffekte, blinde streke, abnormale voortplanting en weerinvloede.

Die gebruik daarvan as 'n middel om aanvarings te voorkom en as 'n navigasiemiddel en 'n waardering van die beperkings daarvan.

(b) Die algemene beginsels wat hiperboliese navigasie ten grondslag lê. Fundamentele verskille tussen verskillende stelsels.

(c) Algemene kennis van radiorigtingsbepaling aan boord van 'n skip. Draaibeuel en goniometerstelsels. Maksimum en minimum seine. Relatiewe rigting. Kwadrantfout. Kalibrering. Effekte van sonsondergang en -opgang. Kuseffekte. Algemene kennis van radiorigstelsels aan wal.

(d) Die algemene beginsels van eggolodging. Transmissiemetodes. Tydreëlaar. Die ontvanger. Metodes van aantekening. Betroubaarheid van aanduidings.

(6) VRAESTEL 6. (SKRIFTELIK.)

WEERKUNDE.

Bo en behalwe die leerplan vir hoof-navigasie-offisier:—

(a) Die vernaamste wolktipes.

(b) Eenvoudige idees oor lugmassas en fronte.

(c) Adiabatiese verandering in die atmosfeer. Stabiliteit en onstabiliteit.

(d) Die frontteorie oor die ontstaan van laagdrukgebiede.

(e) Stel 'n sinoptiese kaart (uitgesonderd fronte) saam volgens 'n aantal kodegroepe soos vervat in dele V en VI van Weerberigte vir die Skeepvaart.

(f) Dekodeer groepe soos verstrek in die internasionale analisekode (deel IV) van Weerberigte vir die Skeepvaart en teken die weerkaart.

(g) Die gebruik van 'n sinoptiese kaart of weerkaart om die waarskynlike weerstoestand en verwagte veranderinge by 'n bepaalde punt of punte te verkry.

(h) Die vernaamste tipes drywende ys en hulle oorsprong. Algemene idees oor die verspreiding en seisoensbewegings daarvan. Navigasie in die nabylig van ys.

(i) Algemene punte wat oorweeg moet word by die keuse van oseaanroetes.

(7) MONDELING.

(a) Buitengewone omstandighede. Verlies van roer; verskuiwing van 'n beskadigde roer. Konstruksie van noodroer. Maak en tewaterlating van vlotte. Aanvaring. Lekke. Beskadiging van allerlei aard. Handherstelwerk en voorsorgsmaatreëls in die geval van ongelukke. Aan die grond vasloop—hoe om die skip weer vlot te maak. 'n Boot laat strand. Stappe wat gedoen moet word wanneer die skip ontredder raak en in nood verkeer.

(b) Beveiliging van bemanning en passasiers in geval van skipbreuk. Verlating van 'n verongelukte skip. Vuurpyle en vuurpyl-toestelle. Verbindings met die kus.

(c) Verlening van hulp aan 'n skip in nood. Redding van bemanning van 'n ontredderde skip.

(d) Hoe om 'n skip op sleeptou te neem en self gesleep te word.

(e) Maneuvers in slegte weer. Voorsorgsmaatreëls voor anker en ter see. Gebruik van olie. Ankering en die hantering van ankers en kables onder alle toestande. Nadering van riviere en hawens en manewrering daarin.

(f) Aanlê in 'n droogdok. Algemene prosedure en voorsorgsmaatreëls wat getref moet word. Gewigsverdeling. Aanlê in 'n droogdok met volle wag vir inspeksie van skroewe of asse. Kimblokke. Die skip op die water laat. Binnevaar van hawe met skade aan skip en/of wag, sowel uit 'n besigheids- as tegniese oogpunt. Beveiliging van wag.

(g) Voorkoming van brand ter see. Selfontbranding. Uitvoerige kennis van die gebruik van brandblustoestelle en voorsorgsmaatreëls by die gebruik daarvan. Besondere verwysing na die blus van oliebrande.

(h) Metodes vir die berokking van ruime en woonruimtes en veiligheidsmaatreëls wat daarby getref moet word.

(i) Algemene organisasie van die werk op 'n skip en die beheer en opleiding van die bemanning. Kennis van opleidingsgeriewe wat aan bemanningslede beskikbaar is.

(j) Kompensering en verstelling van kompas. Demonstrasies met Beall se kompasdeviaskoop.

2. Regulasies vir die voorkoming van botsings op see, ens., soos in paragraaf 5 (a) van die leerplan vir die mondelinge en praktiese eksamen vir Tweede Navigasie-offisier uiteengesit.

3. Die eksaminator kan aan die kandidaat vrae stel oor sy skriftelike werk indien hy dit nodig ag op grond van swak punte wat die kandidaat daarin aan die dag gelê het.

(8) SEINE.

Moet seine kan stuur en ontvang in:—

(a) Semafoor tot agt woorde per minuut.

(b) Morsekode met die flitslamp tot ses woorde per minuut.

(c) Die Internasionale Seinkode.

IV. NAVIGASIE-OFFISIER VAN 'N KUSVAARDER VAN EENHONDERD OF MEER BRUTO-REGISTERTON.

(1) VRAESTEL 1. (SKRIFTELIK.)

KAARTWERK EN LOODSKUNS. (Twee uur.)

(a) As die variasie en 'n afwykingstabel gegee word, herlei ware koerse tot magnetiese en kompaskoerse, en omgekeerd. Bepaal die kompaskoerse en afstand tussen twee posisies. Die uitwerking van stroom op snelheid. Toegee vir drif. Bepaal die kompaskoerse wat gestuur moet word, met toegee vir 'n stroom. As die kompaskoerse wat gestuur word, die snelheid van die skip en die sterkte van die stroom gegee word, bepaal die behoue ware koerse.

(b) Bepaal die posisie van die skip op 'n kaart met behulp van gelyktydige kruispeilings, peiling en vaarlengte, of deur middel van radiokruispeilings, en bring die nodige korreksies aan. Bepaal die skip se posisie deur middel van peilings van een of meer voorwerpe met die meetvaart daartussen, met toegee vir 'n stroom, en bepaal die afstand waarop die skip by 'n gegewe punt sal verbyvaar. Die samestelling van 'n reeks dieptepeilings. Die gebruik van 'n enkele standlyn wanneer die kus genader word.

(c) The use of clearing marks and horizontal and vertical danger angles.

(d) 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 soundings or to the charted heights of shore objects.

(e) 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.

(2) PAPER 2. (WRITTEN.)

PRACTICAL NAVIGATION. (Three hours.)

(a) To find the True Bearing of the Sun and the deviation of the compass for the direction of the ship's head.

(b) To find the latitude by meridian altitude of the Sun.

(c) From an observation of the Sun near the meridian to find the position line and the latitude through which it passes corresponding to a given longitude.

(d) To determine the position line and a position through which it passes from an observation of the Sun out of the meridian.

(3) PAPER 3. (WRITTEN.)

ELEMENTARY SHIP KNOWLEDGE. (Two hours.)

(a) Elementary ideas on ship construction. The candidate will be expected to show his practical acquaintance with framing, shell plating, decks, watertight bulkhead, sounding pipes and air pipes.

(b) The meaning of the terms Displacement and Deadweight. 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.

(c) A general understanding of Centre of Gravity and Centre of Buoyancy and the effect of adding or removing weights. The danger of slack ballast tanks.

(d) A knowledge of the regulations made under paragraph (xxxii) of sub-section (1) of section 356 of the Merchant Shipping Act, 1951.

(4) PAPER 4. (WRITTEN.)

ESSAY IN ONE OF THE OFFICIAL LANGUAGES. (One-and-a-half hours.)

This paper will be designed to test the candidate's ability to write one of the official languages of the Union clearly and grammatically with due attention to spelling, legibility and neatness. It will in no sense be a test of technical knowledge.

(5) ORAL.

1. (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 recognise 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) The use of the rocket apparatus.

(e) A knowledge of the contents of the Merchant Shipping Notices published by the United Kingdom Ministry of Transport and Civil Aviation and the use of Admiralty and South African Notices to Mariners.

2. (a) Marking of ordinary lead line and taking a cast.

(b) The use and upkeep of sounding appliances and logs.

(c) Use and care of engine room telegraphs.

(d) Coming to anchor, the use of two anchors. Mooring to buoys. Coming alongside and leaving a wharf. Entering and leaving a dock.

(e) Keeping an anchor watch. Dragging anchor.

(f) Care, maintenance and use of the life-saving appliances and fire appliances carried by a coasting ship.

(g) Management of boats under oars or sail and in heavy weather. Beaching or landing. Coming alongside.

3. The strength of ropes, including wire ropes. Power gained by purchases.

4. An elementary knowledge of cargo work, as given in the syllabus for Chief Navigating Officer [Paper 5 Section (g)].

5. (a) To read and understand a barometer, thermometer and a hydrometer.

(b) To use a sextant for taking vertical and horizontal angles and to find the index error.

(6) SIGNALS.

To send and receive signals in:—

(a) Semaphore up to eight words per minute.

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

(c) International Code of Signals.

V. MASTER OF A COASTING SHIP OF ONE HUNDRED OR MORE GROSS REGISTER TONS.

(1) PAPER 1. (WRITTEN.)

CHART WORK AND PILOTAGE. (Two hours.)

In addition to the syllabus for Navigating Officer of a coasting ship of one hundred or more gross register tons, questions on the following may be asked either in the written or oral parts of this paper.

(a) Distance of sighting lights. Distance of a point of land of known height.

(b) The use of bearings obtained by ship's Radio Direction Finder and bearings given from a Shore Station. The use of Wireless Beacons.

(c) Candidates will be examined orally on the selection of suitable points for bearings, approaching an anchorage and entering narrow waters. The reliability of charts.

- (c) Die gebruik van veiligheidsmerke en horisontale en vertikale gevaarhoeke.
 (d) Bepaal die tyd en hoogte van hoog- en laagwater by 'n standaardhawe (getyafels van die Admiraliteit). Die gebruik van tafels of 'n diagram om die getyhoogte op enige gegewe tyd te bepaal en, daarvolgens, die benaderde korreksie in dieptepeilings of in die kaarthoogtes van voorwerpe aan wal.
 (e) Kandidate sal 'n mondelinge toets moet aflê oor die gegewens wat op 'n kaart of plan voorkom, veral oor boei, ligte, dieptes en gesteldheid van seebodem, hoogtelyne, getye en getystrome. Kusbekenning. Die intelligente gebruik van vaaraanwysings. Kaartkorreksie.

(2) VRAESTEL 2. (SKRIFTELIK.)

PRAKTIESE NAVIGASIE. (Drie uur.)

- (a) Bepaal die ware peiling van die son en die kompasafwyking vir die boegrigting.
 (b) Bepaal die breedte volgens die meridiaanshoogte van die son.
 (c) Volgens 'n waarneming van die son naby die meridiaan, bepaal die standlyn en die breedte waardeur dit gaan in ooreenstemming met 'n gegewe lengte.
 (d) Bepaal die standlyn en 'n posisie waardeur dit gaan volgens 'n waarneming van die son buite die meridiaan.

(3) VRAESTEL 3. (SKRIFTELIK.)

ELEMENTÊRE SKEEPSKENNIS. (Twee uur.)

- (a) Elementêre idees oor skeepsbou. Die kandidaat moet toon dat hy prakties vertrou is met spante, huidplate, dekke, waterdigte skotte, peilkokers en lugpype.
 (b) Die betekenis van die terme verplasing en ladingsegewig. Gebruik van verplasing- en ton per duimskaal om die gewig van vrag, ens., volgens diepgangmerke te bepaal. Invloed van digtheid van water op diepgang. Toegee vir soetwater.
 (c) 'n Algemene begrip van swaartepunt en drukkingspunt en die uitwerking daarop wanneer gewigte bygevoeg of verwyder word. Die gevaar van gedeeltelik gevulde ballastens.
 (d) Kennis van die regulasies opgestel kragtens paragraaf (xxxii) van subartikel (1) van artikel 356 van die Wet op Handelskeepvaart, 1951.

(4) VRAESTEL 4. (SKRIFTELIK.)

OPSTEL IN EEN VAN DIE AMPTELIKE TALE. (Een en 'n half uur.)

Hierdie vraestel sal opgestel word as 'n toets van die kandidaat se vermoë om een van die amptelike tale van die Unie duidelik en grammatikaal korrek te skryf, met behoorlike aandag aan spelling, leesbaarheid en netheid. Dit sal geensins 'n toets van tegniese kennis wees nie.

(5) MONDELING.

- (a) Grondige kennis van die inhoud en toepassing van die regulasies vir die voorkoming van botsings op see. (Kandidate sal nie in die posisie gestel word waar hulle 'n seilskip moet hanteer nie, maar sal 'n seilskip se ligte moet kan uitken en moet kennis dra van die maanklike manewers daarvan volgens die rigting van die wind.)
 (b) Nood- en loodsseine; strawwe vir misbruik.
 (c) Britse eenvormige stelsel van beboeiing; wrakmerkstelsel.
 (d) Die gebruik van die vuurpyltoestel.
 (e) Kennis van die inhoud van die „Merchant Shipping Notices” gepubliseer deur die Ministerie van Vervoer en Burgerlugvaart van die Verenigde Koninkryk en die gebruik van die Admiraliteit en Suid-Afrika se kennisgewings aan seevaarders.
- (a) Merk van 'n gewonde loodlyn en uitgooi van die dieplod.
 (b) Die gebruik en versorging van dieptepeiltoestelle en skeepsjoernale.
 (c) Gebruik en versorging van masjienkamertelegrawe.
 (d) Voor anker kom, die gebruik van twee ankers. Vasmeer aan boei. Aanlê langs en verlating van 'n kaai. Binnevaar en verlating van 'n dok.
 (e) Hou van ankerwag. Sleepanker.
 (f) Versorging, onderhoud en gebruik van die reddingsgereedskap en brandblustoestelle wat aan boord van 'n kusvaarder gevoer word.
 (g) Hantering van bote wat geroei word of onder seil vaar en in onstuimige weer. Laat strand of land. Langsaam kom.
- Die sterkte van toue, met inbegrip van draadtoue. Kragwins met behulp van takelstelle.
- Elementêre kennis van vragwerk soos vervat in die leerplan vir hoof-navigasie-offisier [vraestel 5, afdeling (g)].
- (a) Moet 'n barometer, termometer en hidrometer kan lees en dit verstaan.
 (b) Die gebruik van 'n sekstant vir die meting van vertikale en horisontale hoeke en bepaling van die indeksfout.

(6) SEINE.

Moet seine kan stuur en ontvang in:—

- (a) Semafoor tot agt woorde per minuut.
 (b) Morsedode met die flitslamp tot ses woorde per minuut.
 (c) Die Internasionale Seinboek.

V. GESAGVOERDER VAN 'N KUSVAARDER VAN EENHONDERD OF MEER BRUTO-REGISTERTON.

(1) VRAESTEL 1. (SKRIFTELIK.)

KAARTWERK EN LOODSKUNS. (Twee uur.)

Bo en behalwe die leerplan vir Navigasie-offisier van 'n kusvaarder van eenhonderd of meer bruto-registerton, kan vrae oor die volgende of in die skriftelike of in die mondelinge gedeeltes van hierdie vraestel gestel word.

- (a) Afstand van rigligte. Afstand van 'n landpunt van bekende hoogte.
 (b) Die gebruik van peilings wat met die skip se radiorigtingsoeker verkry is en peilings wat van 'n kusstasie ontvang is. Die gebruik van radiobakens.
 (c) Kandidate sal 'n mondelinge toets moet aflê oor die uitkies van geskikte punte vir peilings, nadering van 'n ankerplek en binnevaar van smal waters. Die betroubaarheid van kaarte.

(2) PAPER 2. (WRITTEN.)

PRACTICAL NAVIGATION. (Two hours.)

This paper may include questions in the syllabus for Navigating Officer of a coasting ship of 100 or more gross register tons.

- (a) To find the true bearing of any heavenly body and the deviation for the direction of the ship's head.
- (b) To find the approximate time (to the nearest minute) of the meridian passage of a star. To find the latitude by meridian altitude of a star.
- (c) From an observation of a star near the meridian to find the position line and the latitude through which it passes corresponding to a given longitude.
- (d) To determine the position line and a position through which it passes from an observation of a star out of the meridian.
- (e) Recognition of stars of the First Magnitude by reference to the principal constellations.

(3) PAPER 3. (WRITTEN.)

STABILITY AND SEAWORTHINESS. (Two hours.)

- (a) The meaning of Metacentre, Metacentric Height, Initial Stability, Righting Lever, Centre of Flotation, Moment of Change Trim.
- (b) Determination of the 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 weights. Stiff and tender ships. Effect of a shift of cargo or solid ballast. Cargoes liable to shift and precautions to be taken. Deck cargoes. Ballasting. The danger of "free surface" of liquids (without proof or calculations).
- (c) The use of Stability Curves and the data supplied to a ship.
- (d) Simple trim problems.
- (e) Damage affecting seaworthiness. Temporary repairs at sea or in port. Certificates of seaworthiness.
- (f) General principles of cargo stowage and handling.

(4) PAPER 4. (WRITTEN.)

COMPASS DEVIATION. (One-and-a-half hours.)

- (a) A simple knowledge of the meaning of hard and soft iron. Simple ideas of the effect of hard iron, vertical soft iron and horizontal soft iron on the deviations of the compass. The means used to compensate for these effects with special reference to coasting ships.
- (b) Care and maintenance of magnetic compasses. Siting of compasses with particular reference to the proximity of magnetic material and electrical appliances.
- (c) To find the Magnetic Bearing of a distant object from compass bearings taken on equidistant points and to construct a table of deviations.

(5) PAPER 5. (WRITTEN.)

LANGUAGE. (One hour.)

This paper will be designed to test the candidate's ability to write one of the official languages of the Union clearly and grammatically with due attention to spelling, legibility and neatness. It will in no sense be a test of technical knowledge. This paper may consist of an essay or an exercise in writing a letter or report.

(6) ORAL.

1. Regulations for preventing collisions at sea, etc., as set forth in paragraph 1 (a) of the syllabus for the oral examination of Navigating Officer of a coasting ship of 100 or more gross register tons.
2. (a) Handling a ship in bad weather and when it is disabled.
- (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 the crew of a disabled ship.
- (d) Effect of screws on the steering of a ship. Manoeuvring a ship in rivers and harbours.
3. (a) General knowledge of the requirements of the Merchant Shipping Acts and regulations relating to strandings, collisions or other casualties, reports to be made out in cases of death or injury, return of crew list, agreements and certificates of discharge.
- (b) A shipmaster's knowledge of the law relating to load line marks and entries and reports to be made respecting them.
- (c) Entering and clearing a coasting ship.
4. Meteorology sufficient to understand the meaning of weather bulletins for shipping (Coastal Areas). Visual and broadcast storm warnings.
5. The practical use of Radar as an aid to navigation.

(7) PAPER 7.

SIGNALS.

1. To send and receive signals in:—
 - (a) 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 Radio D/F.

(2) VRAESTEL 2. (SKRIFTELIK.)

PRAKTIESE NAVIGASIE. (Twee uur.)

Hierdie vraestel kan vrae insluit wat in die leerplan vir navigasie-offisier van 'n kusvaarder van eenhonderd of meer bruto-registerton voorkom.

- (a) Bepaal die ware ligging van enige hemelliggaam en die afwyking vir die boeigrigting.
- (b) Bepaal die benaderde tyd (tot die naaste minuut) wat dit 'n ster neem om deur die meridiaan te gaan. Bepaal die breedtegraad volgens die meridiaanshoogte van 'n ster. Lengtegraad volgens 'n poolsterwaarneming.
- (c) Volgens 'n waarneming van 'n ster naby die meridiaan, bepaal die standlyn en die breedte waardeur dit gaan in ooreenstemming met 'n gegewe lengte.
- (d) Bepaal die standlyn en 'n posisie waardeur dit gaan volgens 'n waarneming van 'n ster buite die meridiaan.
- (e) Herkenning van sterre van die grootste helderheid deur verwysing na die vernaamste sterrebeelde.

(3) VRAESTEL 3. (SKRIFTELIK.)

STABILITEIT EN SEEWAARDIGHEID. (Twee uur.)

(a) Die betekenis van metasenter, metasenterhoogte, aanvangstabiliteit, regbringshefboom, dryfvermoëpunt, moment van trimverandering.

(b) Bepaling van die swaartepunt van 'n skip in 'n nuwe toestand as die swaartepunt in die ou toestand gegee word. Uitwerking op die swaartepuntligging wanneer gewigte bygevoeg, verwyder of verskuif word. Stywe en rank skepe. Uitwerking van verskuiwing van frag of soliede ballas. Vragte wat maklik kan skuif en voorsorgsmaatreëls wat getref moet word. Dekvragte. Ballasvulling. Die gevaar van „vrye oppervlakte” van vloeistowwe (sonder bewys of berekings).

- (c) Die gebruik van stabiliteitskrommes en die gegewens wat aan 'n skip verskaf word.
- (d) Eenvoudige probleme oor trim.
- (e) Skade wat seewaardigheid raak. Tydelike herstelwerk ter see of in hawe. Sertifikate van seewaardigheid.
- (f) Algemene beginsels van vragstuwing en vraghantering.

(4) VRAESTEL 4. (SKRIFTELIK.)

KOMPASAFWYKING. (Een en 'n half uur.)

(a) Eenvoudige kennis van die betekenis van harde en sagte yster. Eenvoudige idees oor die invloed van harde yster, vertikale sagte yster en horisontale sagte yster op afwykings van die kompas. Die middels wat aangewend word om vir hierdie invloede te kompenseer veral met betrekking tot kusvaarders.

(b) Versorging en onderhoud van magnetiese kompas. Opstelling van kompas met besondere verwysing na die nabyheid van magnetiese materiaal en elektriese toestelle.

(c) Bepaal die magnetiese peiling van 'n afgeleë voorwerp volgens kompaspeilings wat op punte ewe ver van mekaar gemaak is en stel 'n afwykingstabel saam.

(5) VRAESTEL 5. (SKRIFTELIK.)

TAAL. (Een uur.)

Hierdie vraestel sal opgestel word as 'n toets van die kandidaat se vermoë om een van die amptelike tale van die Unie duidelik en grammatikaal korrek te skryf, met behoorlik aandag aan spelling, leesbaarheid en netheid. Dit sal geensins 'n toets van tegniese kennis wees nie. Hierdie vraestel kan bestaan uit 'n opstel of 'n oefening in die skryf van 'n brief of verslag.

(6) MONDELING.

1. Regulasies vir die voorkoming van botsings op see, ens., soos in die leerplan vir die mondelinge eksamen vir Navigasie-offisier van 'n kusvaarder van eenhonderd of meer bruto-registerton uiteengesit.

2. (a) Hantering van 'n skip in slegte weer of wanneer dit ontredder is.

(b) Beveiliging van bemanning en passasiers in geval van skipbreuk. Verlating van 'n verongelukte skip. Vuurpyle en vuurpyl-toetstels. Verbindings met die kus.

(c) Hulp aan 'n skip in nood. Redding van die bemanning van 'n ontredderde skip.

(d) Uitwerking van skroewe op die stuur van 'n skip. Maneuvrering van 'n skip in riviere en hawens.

3. (a) Algemene kennis van die vereistes van die Wette en regulasies op Handelskeepvaart met betrekking tot stranding, aanvaring of ander ongelukke, rapporte wat in geval van dood of besering opgestel moet word, opgawe van bemanningslys, kontrakte en ontslag-sertifikate.

(b) Kapteinskennis van die wet betreffende laslynmerke en inskrywings wat gedoen en rapporte wat ten opsigte daarvan opgestel moet word.

(c) Inklaring en uitklaring van 'n kusvaarder.

4. Voldoende kennis van weerkunde om die betekenis van weerberigte vir die skeepvaart (kusgebiede) te verstaan. Optiese en radio-stormwaarskuwings.

5. Die praktiese gebruik van RADAR as 'n navigasiemiddel.

(7) VRAESTEL 7. SEINE.

1. Moet seine kan stuur en ontvang in:—

- (a) Semafoor tot agt woorde per minuut.
- (b) Morsekode met die flitslamp tot ses woorde per minuut.
- (c) Die Internasionale Seinboek.

2. Die praktiese gebruik van die skeepsradiorigtingsoeker.

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Hierdie tydskrif bevat o.a. 'n maandelikse ekonomiese oorsig (met statistiek) van besigheids- en nywerheidstoestande in die Unie, die jongste departementele inligting oor afsetmoontlikhede vir Unie-produkte in lande waar die Unie oorsese handelsverteenvoordigers het, lyste van handelsnavrae, besonderhede in verband met nywerheidsbedrywighede in die Unie, die jongste aspekte van prys- en voorradebeheer, die meeste verslae (volledig) van die Raad van Handel en Nywerheid, en artikels van 'n algemene aard oor die handel en nywerheid

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INTEKENGELD: In die Unie van S.A., Suidwes-Afrika, Betsjoeanaland-Protectoraat, Swasieland, Basoetoland, Suid- en Noord-Rhodesie, Mosambiek, Angola, Belgiese Kongo, Niassaland, Tanganjika, Kenia en Oeganda teen 6d per eksemplaar, of teen 5/- per jaar (7/6 elders) vooruitbetaalbaar aan Die Staatsdrukker, Pretoria

VERSKYN IN ALBEI AMPTELIKE TALE