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PROKLAMASIE

van die

Staatspresident van die Republiek van Suid-Afrika

No. R. 71, 1984

HANDELSKEEPVAARTWET, 1951
(WET 57 VAN 1951)

BYVOEGING VAN DIE INTERNASIONALE KONVEN-
SIE INSAKE DIE STANDAARDE VAN OPLEIDING,
DIPLOMERING EN WAGHOU VIR SEEVAARDERS,
1978, AS 'N BYLAE TOT DIE WET

Kragtens die bepalings van artikel 356*bis* (1) van die
Handelskeepvaartwet, 1951 (Wet 57 van 1951), voeg ek
hierby die Internasionale Konvensie insake die Standaarde
van Opleiding, Diplomerings en Waghous vir Seevaarders,
1978 wat in die Bylae hiervan vervat is as Vyfde Bylae van
genoemde Wet by. Genoemde Bylae tree in werking op 28
April 1984.

Gegee onder my Hand en die Seël van die Republiek van
Suid-Afrika te Pretoria, op hede die Sewe-en-twintigste dag
van April Eenduisend Negehonderd Vier-en-tagtig.

M. VILJOEN, Staatspresident.

Op las van die Staatspresident-in-rade:

H. S. J. SCHOEMAN.

870—A

PROCLAMATION

by the

State President of the Republic of South Africa

No. R. 71, 1984

MERCHANT SHIPPING ACT, 1951
(ACT 57 OF 1951)

ADDITION OF THE INTERNATIONAL CONVENTION
OF STANDARDS OF TRAINING, CERTIFICATION
AND WATCHKEEPING FOR SEAFARERS, 1978, AS A
SCHEDULE TO THE ACT

Under and by virtue of the powers vested in me by sec-
tion 356*bis* (1) of the Merchant Shipping Act, 1951 (Act 57
of 1951), as amended, I hereby add the International Con-
vention on Standards of Training, Certification and Watch-
keeping for Seafarers, 1978 as set out in the Schedule hereto
as the Fifth Schedule of the said Act. The said Schedule
shall come into operation on 28 April 1984.

Given under my Hand and the Seal of the Republic of
South Africa at Pretoria this Twenty-seventh day of April,
One thousand Nine hundred and Eighty-four.

M. VILJOEN, State President.

By Order of the State President-in-Council:

H. S. J. SCHOEMAN.

9236—1

BYLAE**INTERNASIONALE KONVENSIE INSAKE STANDAARDE VAN OPLEIDING, DIPLOMERING EN WAGHOU VIR SEEVAARDERS, 1978**

OMDAT DIE PARTYE BY HIERDIE KONVENSIE,

BEGERIG IS om die veiligheid van lewens en eiendom ter see en die beskerming van die mariene omgewing te bevorder deur met gemeenskaplike instemming internasionale standaarde van opleiding, diplomering en waghou vir seevaarders vas te lê, en

MEEN dat hierdie oogmerk ten beste bereik kan word deur die sluit van 'n Internasionale Konvensie insake Standaarde van Opleiding, Diplomering en Waghou vir Seevaarders,

HET HULLE SOOS VOLG OOREENGEKOM:

ARTIKEL I*Algemene verpligtinge ingevolge die Konvensie*

(1) Die partye verbind hulle om uitvoering te gee aan die bepalings van die Konvensie en die Aanhangsel daarvan, wat 'n integrerende deel van die Konvensie uitmaak. Elke verwysing na die Konvensie geld terselfdertyd as 'n verwysing na die Aanhangsel.

(2) Die Partye verbind hulle om al die wette, verordeninge, lasgewings en regulasies uit te vaardig en al die ander nodige stappe te doen om volle uitvoering aan die Konvensie te gee ten einde te verseker dat, vir sover dit die beveiliging van menselewens en eiendom ter see en die beskerming van die mariene omgewing betref, seevaarders aan boord van skepe gekwalifiseer en bekwaam vir hulle pligte is.

ARTIKEL II*Woordomskrivings*

Vir die toepassing van die Konvensie, tensy uitdruklik anders bepaal, beteken—

- (a) "Party" 'n Staat vir wie die Konvensie in werking getree het;
- (b) "Administrasie" die Regering van die Party onder wie se vlag die skip geregtig is om te vaar;
- (c) "Sertifikaat" 'n geldige dokument, hoe dit ook al bekend mag staan, uitgereik deur of op gesag van die Administrasie of deur die Administrasie erken, wat die besitter daarvan magtig om diens te verrig ooreenkomstig die stipulasies in die dokument of ooreenkomstig nasionale regulasies;
- (d) "gediplomeer" die behoorlike besit van 'n sertifikaat;
- (e) "Organisasie" die Intergoewermentele Seevaartkonsultorganisasie (IMCO);
- (f) "Sekretaris-generaal" die Sekretaris-generaal van die Organisasie;
- (g) "seeskip" 'n ander skip as dié wat uitsluitlik op binnelandse waters vaar of op waters binne of digby beskutte waters of gebiede waar haweregulasies van krag is;
- (h) "vissersvaartuig" 'n vaartuig wat gebruik word vir die vang van vis, walvisse, robbe, walrusse of ander lewendende hulpbronne van die see;
- (i) "Radioregulasies" die Radioregulasies aangeheg by of beskou as aangeheg te wees by die jongste Internasionale Telekommunikasiekonvensie wat te eniger tyd van krag mag wees.

SCHEDULE**INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS, 1978**

THE PARTIES TO THIS CONVENTION,

DESIRING to promote safety of life and property at sea and the protection of the marine environment by establishing in common agreement international standards of training, certification and watchkeeping for seafarers.

CONSIDERING that this end may best be achieved by the conclusion of an International Convention on Standards of Training, Certification and Watchkeeping for Seafarers,

HAVE AGREED as follows:

ARTICLE I*General obligations under the Convention*

(1) The Parties undertake to give effect to the provisions of the Convention and the Annex thereto, which shall constitute an integral part of the Convention. Every reference to the Convention constitutes at the same time a reference to the Annex.

(2) The Parties undertake to promulgate all laws, decrees, orders and regulations and to take all other steps which may be necessary to give the Convention full and complete effect, so as to ensure that, from the point of view of safety of life and property at sea and the protection of the marine environment, seafarers on board ships are qualified and fit for their duties.

ARTICLE II*Definitions*

For the purpose of the Convention, unless expressly provided otherwise—

- (a) "Party" means a State for which the Convention has entered into force;
- (b) "Administration" means the Government of the Party whose flag the ship is entitled to fly;
- (c) "certificate" means a valid document, by whatever name it may be known, issued by or under the authority of the Administration or recognized by the Administration authorizing the holder to serve as stated in this document or as authorized by national regulations;
- (d) "certificated" means properly holding a certificate;
- (e) "Organization" means the Inter-Governmental Maritime Consultative Organization (IMCO);
- (f) "Secretary-General" means the Secretary-General of the Organization;
- (g) "sea-going ship" means a ship other than those which navigate exclusively in inland waters or in waters within, or closely adjacent to, sheltered waters or areas where port regulations apply;
- (h) "fishing vessel" means a vessel used for catching fish, whales, seals, walrus or other living resources of the sea;
- (i) "Radio Regulations" means the Radio Regulations annexed to, or regarded as being annexed to, the most recent International Telecommunication Convention which may be in force at any time.

ARTIKEL III*Toepassing*

Die Konvensie is van toepassing op seevaarders in diens aan boord van seeskepe wat daarop geregtig is om onder 'n Party se vlag te vaar, uitgesonderd diegene in diens aan boord van—

- (a) oorlogskepe, vlootbystandsvaartuie of ander skepe in besit van of gebruik deur 'n Staat en alleenlik aangewend vir nie-kommersiële staatsdienste; hoewel elke Party by wyse van die tref van gepaste maatreëls wat nie die operasies of gebruiksmoontlikhede van sodanige skepe in sy besit of gebruik sal belemmer nie, moet verseker dat die persone in diens aan boord van sodanige skepe aan die vereistes van die Konvensie voldoen vir sover dit redelik en doenlik is;
- (b) vissersvaartuie;
- (c) plesierjagte wat nie handel dryf nie; of
- (d) houtskepe van primitiewe konstruksie.

ARTIKEL IV*Mededeling van inligting*

(1) Die Partye moet so gou doenlik die volgende aan die Sekretaris-generaal verstrek:

- (a) Die teks van wette, verordeninge, lasgewings, regulasies en dokumente uitgevaardig betreffende die onderskeie aangeleenthede binne die bestek van die Konvensie;
- (b) volledige besonderhede, waar van toepassing, van die inhoud en duur van studiekursusse, tesame met hulle nasionale eksamen- en ander vereistes vir elke sertifikaat uitgereik in ooreenstemming met die Konvensie; en
- (c) 'n voldoende aantal eksemplaarsertifikate uitgereik ingevolge die Konvensie.

(2) Die Sekretaris-generaal moet al die Partye in kennis stel van die ontvangs van elke mededeling ingevolge paragraaf (1) (a) en moet hulle, onder andere vir die doeleindes van Artikels IX en X, op versoek voorsien van enige inligting wat ingevolge paragrawe (1) (b) en (c) aan hom verstrek is.

ARTIKEL V*Ander verdrae en vertolking*

(1) Alle vorige verdrae, konvensies en reëlins insake die standaard van opleiding, diplomering en waghouding vir seevaarders wat tussen die Partye van krag is, bly ten volle van krag vir die termyn daarvan vir sover dit die volgende betref:

- (a) Seevaarders vir wie hierdie Konvensie nie geld nie; en
- (b) seevaarders vir wie hierdie Konvensie geld, met betrekking tot aangeleenthede waarvoor dit nie uitdruklik voorsiening maak nie.

(2) In die mate wat sodanige verdrae, konvensies of reëlins egter strydig is met die bepalings van die Konvensie, moet die Partye hulle verpligtinge ingevolge sodanige verdrae, konvensies en reëlins hersien met die doel om te verseker dat daar geen teenstrydigheid is tussen dié verpligtinge en hulle verpligtinge ingevolge die Konvensie nie.

(3) Alle aangeleenthede waarvoor daar nie uitdruklik in die Konvensie voorsiening gemaak is nie, bly onderworpe aan die wetgewing van die Partye.

ARTICLE III*Application*

The Convention shall apply to seafarers serving on board sea-going ships entitled to fly the flag of a Party except to those serving on board—

- (a) warships, naval auxiliaries or other ships owned or operated by a State and engaged only on governmental non-commercial service; however, each Party shall ensure by the adoption of appropriate measures not impairing the operations or operational capabilities of such ships owned or operated by it, that the persons serving on board such ships meet the requirements of the Convention so far as is reasonable and practicable;
- (b) fishing vessels;
- (c) pleasure yachts not engaged in trade; or
- (d) wooden ships of primitive build.

ARTICLE IV*Communication of information*

(1) The Parties shall communicate as soon as practicable to the Secretary-General—

- (a) the text of laws, decrees, orders, regulations and instruments promulgated on the various matters within the scope of the Convention;
- (b) full details, where appropriate, of contents and duration of study courses, together with their national examination and other requirements for each certificate issued in compliance with the Convention;
- (c) a sufficient number of specimen certificates issued in compliance with the Convention.

(2) The Secretary-General shall notify all Parties of the receipt of any communication under paragraph (1) (a) and, *inter alia*, for the purposes of Articles IX and X, shall, on request, provide them with any information communicated to him under paragraphs (1) (b) and (c).

ARTICLE V*Other treaties and interpretation*

(1) All prior treaties, conventions and arrangements relating to standards of training, certification and watchkeeping for seafarers in force between the Parties, shall continue to have full and complete effect during the terms thereof as regards—

- (a) seafarers to whom this Convention does not apply;
- (b) seafarers to whom this Convention applies, in respect of matters for which it has not expressly provided.

(2) To the extent, however, that such treaties, conventions or arrangements conflict with the provisions of the Convention, the Parties shall review their commitments under such treaties, conventions and arrangements with a view to ensuring that there is no conflict between these commitments and their obligations under the Convention.

(3) All matters which are not expressly provided for in the Convention remain subject to the legislation of Parties.

(4) Niks in die Konvensie mag die kodifisering en ontwikkeling benadeel nie van die seereg deur die Verenigde nasies se Konferensie oor Seereg wat belê is ingevolge resoluie 2750 C(XXV) van die Algemene Vergadering van die Verenigde Nasies, nóg van die huidige of toekomstige aansprake en regsmenings van enige Staat rakende die seereg en die aard en omvang van Staatskusjurisdiksie en Staatsvlagjurisdiksie.

ARTIKEL VI

Sertifikate

(1) Sertifikate vir gesagvoerders, offisiere en matrose word uitgereik aan die kandidate wat tot die tevredenheid van die Administrasie voldoen aan die vereistes vir diens, ouderdom, mediese geskiktheid, opleiding, kwalifikasie en eksamens ooreenkomstig die toepaslike bepalings in die Aanhangsel van die Konvensie.

(2) Sertifikate vir gesagvoerders en offisiere wat ooreenkomstig hierdie Artikel uitgereik word, moet deur die Administrasie wat dit uitreik geëndosseer word in die vorm voorgeskryf in Regulasie I/2 van die Aanhangsel. Indien die taal wat gebruik word nie Engels is nie, moet die endossement 'n vertaling in Engels insluit.

ARTIKEL VII

Oorgangsbepalings

(1) 'n Bekwaamheid- of dienssertifikaat in 'n hoedanigheid waarvoor die Konvensie 'n sertifikaat vereis en wat ooreenkomstig die wette van 'n Party of ooreenkomstig die Radioregulasies uitgereik word voor die inwerkingtreding van die Konvensie vir die bepaalde Party, word as geldig vir diens erken ná die inwerkingtreding van die Konvensie vir die Party.

(2) Ná die inwerkingtreding van die Konvensie vir 'n Party, kan sy Administrasie steeds vir 'n tydperk van hoogstens vyf jaar bekwaamheidsertifikate uitreik ooreenkomstig sy vorige gebruike. Sodanige sertifikate word as geldig erken vir die doeleindes van die Konvensie. Gedurende die oorgangstydperk moet sodanige sertifikate slegs uitgereik word aan seevaarders wat met hulle seediens begin het voor die inwerkingtreding van die Konvensie vir die Party binne die spesifieke skeepsafdeling waarop die sertifikate betrekking het. Die Administrasie moet toesien dat alle ander kandidate vir diplomering geëksamineer en gediplomeer word ooreenkomstig die Konvensie.

(3) 'n Party kan, binne twee jaar na die inwerkingtreding van die Konvensie vir die betrokke Party, 'n dienssertifikaat uitreik aan seevaarders wat nóg oor 'n toepaslike sertifikaat kragtens die Konvensie beskik nóg oor 'n bekwaamheidsertifikaat uitgereik kragtens sy wette voor die inwerkingtreding van die Konvensie vir die Party, maar wat—

- (a) in diens was in die hoedanigheid waarvoor hulle 'n dienssertifikaat wil hê vir minstens drie jaar op see binne die sewe jaar wat die inwerkingtreding van die Konvensie vir die Party direk voorafgaan;
- (b) bewys voorgelê het dat hulle daardie diens bevredigend gelewer het;
- (c) die Administrasie oortuig het van hulle mediese geskiktheid, met inbegrip van gesig en gehoor, met inagneming van hulle ouderdom ten tyde van die aansoek.

Vir die doeleindes van die Konvensie moet 'n dienssertifikaat wat kragtens hierdie paragraaf uitgereik is, geag word gelykwaardig te wees met 'n sertifikaat wat kragtens die Konvensie uitgereik is.

(4) Nothing in the Convention shall prejudice the codification and development of the law of the sea by the United Nations Conference on the Law of the Sea convened pursuant to resolution 2750 C(XXV) of the General Assembly of the United Nations, nor the present or future claims and legal views of any State concerning the law of the sea and the nature and extent of coastal and flag State jurisdiction.

ARTICLE VI

Certificates

(1) Certificates for master, officers or ratings shall be issued to those candidates who, to the satisfaction of the Administration, meet the requirements for service, age, medical fitness, training, qualification and examinations in accordance with the appropriate provisions of the Annex to the Convention.

(2) Certificates for masters and officers, issued in compliance with this Article, shall be endorsed by the issuing Administration in the form as prescribed in Regulation I/2 of the Annex. If the language used is not English, the endorsement shall include a translation into that language.

ARTICLE VII

Transitional provisions

(1) A certificate of competency or of service in a capacity for which the Convention requires a certificate and which before entry into force of the Convention for a Party is issued in accordance with the laws of that Party or the Radio Regulations, shall be recognized as valid for service after entry into force of the Convention for that Party.

(2) After the entry into force of the Convention for a Party, its Administration may continue to issue certificates of competency in accordance with its previous practices for a period not exceeding five years. Such certificates shall be recognized as valid for the purpose of the Convention. During this transitional period such certificates shall be issued only to seafarers who had commenced their sea service before entry into force of the Convention for that Party within the specific ship department to which those certificates relate. The Administration shall ensure that all other candidates for certification shall be examined and certificated in accordance with the Convention.

(3) A Party may, within two years after entry into force of the Convention for that Party, issue a certificate of service to seafarers who hold neither an appropriate certificate under the Convention nor a certificate of competency issued under its laws before entry into force of the Convention for that Party but who have—

- (a) served in the capacity for which they seek a certificate of service for not less than three years at sea within the last seven years preceeding entry into force of the Convention for that Party;
- (b) produced evidence that they have performed that service satisfactorily;
- (c) satisfied the Administration as to medical fitness, including eyesight and hearing, taking into account their age at the time of application.

For the purpose of the Convention, a certificate of service issued under this paragraph shall be regarded as the equivalent of a certificate issued under the Convention.

ARTIKEL VIII*Vrystelling*

(1) In buitengewone omstandighede waar dit gebiedend noodsaaklik is, kan Administrasies, as dit na hulle mening nie 'n gevaar skep vir persone, eiendom of die omgewing nie, 'n vrystelling uitreik wat 'n bepaalde seevaarder toelaat om vir 'n bepaalde tydperk van hoogstens ses maande op 'n spesifieke skip in 'n hoedanigheid buiten dié van radio-offisier of radiotelefoonbediener, uitgesonderd soos bepaal deur die betrokke Radioregulasies, diens te doen sonder dat hy oor die toepaslike sertifikaat daarvoor beskik, mits die persoon aan wie die vrystelling uitgereik word, na die Administrasie se oortuiging voldoende gekwalifiseer is om die vakante pos veilig te beklee. Vrystellings mag egter nie uitgereik word aan 'n gesagvoerder of hoofingenieur-offisier nie, uitgesonderd in gevalle van oormag, en dan slegs vir die kortste moontlike tydperk.

(2) 'n Vrystelling ten opsigte van 'n pos mag net uitgereik word aan 'n persoon wat behoorlik gediplomeer is om die pos onmiddellik daaronder te beklee. Waar die Konvensie geen diplomering ten opsigte van die pos daaronder vereis nie, kan 'n vrystelling uitgereik word aan 'n persoon wie se kwalifikasies en ervaring na die Administrasie se oordeel duidelik gelykwaardig is met die vereistes van die pos wat gevul moet word, met dien verstande dat indien sodanige persoon oor geen toepaslike sertifikaat beskik nie, daar van hom vereis moet word dat hy in 'n toets slaag wat deur die Administrasie aanvaar word as bewys daarvan dat sodanige vrystelling met veiligheid uitgereik kan word. Hierbenevens moet die Administrasie toesien dat die betrokke pos so gou moontlik gevul word deur die houër van 'n toepaslike sertifikaat.

(3) Die Partye moet so spoedig moontlik ná 1 Januarie elke jaar 'n verslag aan die Sekretaris-generaal stuur waarin gegewens verstrek word aangaande die totale aantal vrystellings, met betrekking tot elke hoedanigheid waarvoor 'n sertifikaat vereis word, wat gedurende die voorafgaande jaar aan seeskepe uitgereik is, tesame met gegewens oor die getalle van dié skepe van onderskeidelik groter en kleiner as 1 600 bruto register-ton.

ARTIKEL IX*Ekwivalente*

(1) Die Konvensie verhoed nie dat 'n Administrasie ander onderwys- en opleidingsreëlings behou of tref nie, insluitende dié wat seediens en skeepsorganisasie behels wat spesiaal aangepas is by tegniese ontwikkelings en vir spesiale tipes skepe en doeleindes, solank die vlak van die seediens, kennis en vaardigheid in verband met die navigasie en tegniese hantering van skip en vrag 'n mate van veiligheid op see verseker en 'n voorkomende uitwerking het wat besoeiding betref wat ten minste gelykwaardig is met die vereistes van die Konvensie.

(2) Die besonderhede van sodanige reëlings moet so gou doenlik gerapporteer word aan die Sekretaris-generaal, wat sodanige besonderhede aan alle Partye moet deurstuur.

ARTIKEL X*Kontrole*

(1) Wanneer hulle in die hawens van 'n Party is, is skepe, uitgesonderd dié wat by Artikel III uitgesluit word, onderworpe aan kontrole deur behoorlik gemagtigde beamptes van dié Party om seker te maak dat alle seevaarders in diens aan boord wat ingevolge die Konvensie gediplomeer moet wees, sodanig gediplomeer is of oor 'n toepaslike vrystelling beskik. Sodanige sertifikaat moet aanvaar word tensy daar klaarblyklike gronde is om te glo dat 'n sertifikaat op bedrieglike wyse bekom is of dat die sertifikaathouër nie die persoon is aan wie die sertifikaat aanvanklik uitgereik is nie.

ARTICLE VIII*Dispensation*

(1) In circumstances of exceptional necessity, Administrations, if in their opinion this does not cause danger to persons, property or the environment, may issue a dispensation permitting a specified seafarer to serve in a specified ship for a specified period not exceeding six months in a capacity, other than that of the radio officer or radiotelephone operator, except as provided by the relevant Radio Regulations, for which he does not hold the appropriate certificate, provided that the person to whom the dispensation is issued shall be adequately qualified to fill the vacant post in a safe manner, to the satisfaction of the Administration. However, dispensations shall not be granted to a master or chief engineer officer, except in circumstances of *force majeure* and then only for the shortest possible period.

(2) Any dispensation granted for a post shall be granted only to a person properly certificated to fill the post immediately below. Where certification of the post below is not required by the Convention, dispensation may be issued to a person whose qualification and experience are, in the opinion of the Administration, of a clear equivalence to the requirements for the post to be filled, provided that, if such a person holds no appropriate certificate, he shall be required to pass a test accepted by the Administration as demonstrating that such a dispensation may safely be issued. In addition, Administration shall ensure that the post in question is filled by the holder of an appropriate certificate as soon as possible.

(3) Parties shall, as soon as possible after 1 January of each year, send a report to the Secretary-General giving information of the total number of dispensations in respect of each capacity for which a certificate is required that have been issued during the year to sea-going ships, together with information as to the numbers of those ships above and below 1 600 gross register tons respectively.

ARTICLE IX*Equivalents*

(1) The Convention shall not prevent an Administration from retaining or adopting other educational and training arrangements, including those involving sea-going service and shipboard organization especially adapted to technical developments and to special types of ships and trades, provided that the level of sea-going service, knowledge and efficiency as regards navigational and technical handling of ship and cargo ensures a degree of safety at sea and has a preventive effect as regards pollution at least equivalent to the requirements of the Convention.

(2) Details of such arrangements shall be reported as early as practicable to the Secretary-General who shall circulate such particulars to all Parties.

ARTICLE X*Control*

(1) Ships, except those excluded by Article III, are subject, while in the ports of a Party, to control by officers duly authorized by that Party to verify that all seafarers serving on board who are required to be certificated by the Convention are so certificated or hold an appropriate dispensation. Such certificates shall be accepted unless there are clear grounds for believing that a certificate has been fraudulently obtained or that the holder of a certificate is not the person to whom that certificate was originally issued.

(2) Ingeval daar tekortkominge ontdek word ingevolge paragraaf (1) of ingevolge die prosedures uiteengesit in Regulasie I/4—"Kontrolleringsprosedures"—moet die beampte wat die kontrole uitoefen die gesagvoerder van die skip en die Konsul of, in sy afwesigheid, die naaste diplomatieke verteenwoordiger of die maritieme owerheid van die Staat onder wie se vlag die skip geregtig is om te vaar, onverwyld skriftelik in kennis stel sodat gepaste stappe gedoen kan word. Sodanige kennisgewing moet die tekortkominge wat gevind is en die gronde waarop die Party bepaal dat dié tekortkominge 'n gevaar skep vir persone, eiendom of die omgewing, in besonderhede noem.

(3) Indien die tekortkominge genoem in paragraaf (3) van Regulasie I/4 by die uitoefening van die kontrole ingevolge paragraaf (1), met inagneming van die grootte en tipe skip en die lengte en aard van die reis, nie reggestel word nie en daar vasgestel word dat dit 'n gevaar skep vir persone, eiendom of die omgewing, moet die Party wat die kontrole uitoefen, stappe doen wat sal verseker dat die skip nie uitvaar nie tensy en voordat daar dermate aan die vereistes voldoen word dat die gevaar uit die weg geruim is. Die feite aangaande die optrede moet stiptelik aan die Sekretaris-generaal gerapporteer word.

(4) By die uitoefening van kontrole kragtens hierdie Artikel moet alle moontlike pogings aangewend word om te verhoed dat 'n skip ten onregte aangehou of vertraag word. Indien 'n skip aldus aangehou of vertraag word, is hy op vergoeding geregtig vir alle verlies of skade wat daaruit voortspruit.

(5) Hierdie Artikel moet toegepas word op 'n wyse wat nodig mag wees ten einde te verseker dat skepe wat onder die vlag van 'n nie-Party vaar, nie met meer begunstiging behandel word as skepe wat onder die vlag van 'n Party vaar nie.

ARTIKEL XI

Bevordering van tegniese samewerking

(1) Partye by die Konvensie moet, in oorleg met en met die bystand van die Organisasie, steun bevorder vir die Partye wat om tegniese bystand vra vir—

- (a) die opleiding van administratiewe en tegniese personeel;
- (b) die stigting van inrigtings vir die opleiding van seevaarders;
- (c) die verskaffing van toerusting en geriewe vir opleidingsinrigtings;
- (d) die ontwikkeling van toereikende opleidingsprogramme, insluitende praktiese opleiding op seeskepe; en
- (e) die vergemakliking van ander maatreëls en reëlings ter bevordering van die kwalifikasies van seevaarders; verkieslik op 'n nasionale, substreek- of streekgrondslag, om die oogmerke en doelstellings van die Konvensie te bevorder, met inagneming van die spesiale behoeftes van ontwikkelende lande in dié opsig.

(2) Van sý kant af moet die Organisasie genoemde pogings opvolg, soos wat dit toepaslik mag wees, in oorleg of samewerking met ander internasionale organisasies, veral die Internasionale Arbeidsorganisasie.

ARTIKEL XII

Wysigings

(1) Die Konvensie kan deur een van die volgende twee prosedures gewysig word:

- (a) Wysigings ná oorweging binne die Organisasie:
 - (i) 'n Wysiging voorgestel deur 'n Party moet aan die Sekretaris-generaal voorgelê word, wat dit dan minstens ses maande voor die oorweging

(2) In the event that any deficiencies are found under paragraph (1) or under the procedures specified in Regulation I/4—"Control Procedures", the officer carrying out the control shall forthwith inform, in writing, the master of the ship and the Consul or, in his absence, the nearest diplomatic representative or the maritime authority of the State whose flag the ship is entitled to fly, so that appropriate action may be taken. Such notification shall specify the details of the deficiencies found and the grounds on which the Party determines that these deficiencies pose a danger to persons, property or the environment.

(3) In exercising the control under paragraph (1) if, taking into account the size and type of the ship and the length and nature of the voyage, the deficiencies referred to in paragraph (3) of Regulation I/4 are not corrected and it is determined that this fact poses a danger to persons, property or the environment, the Party carrying out the control shall take steps to ensure that the ship will not sail unless and until these requirements are met to the extent that the danger has been removed. The facts concerning the action taken shall be reported promptly to the Secretary-General.

(4) When exercising control under this Article, all possible efforts shall be made to avoid a ship being unduly detained or delayed. If a ship is so detained or delayed it shall be entitled to compensation for any loss or damage resulting therefrom.

(5) This Article shall be applied as may be necessary to ensure that no more favourable treatment is given to ships entitled to fly the flag of a non-Party than is given to ships entitled to fly the flag of a Party.

ARTICLE XI

Promotion of technical co-operation

(1) Parties to the Convention shall promote, in consultation with, and with the assistance of, the Organization, support for those Parties which request technical assistance for—

- (a) training of administrative and technical personnel;
- (b) establishment of institutions for the training of seafarers;
- (c) supply of equipment and facilities for training institutions;
- (d) development of adequate training programmes, including practical training on sea-going ships; and
- (e) facilitation of other measures and arrangements to enhance the qualifications of seafarers;

preferably on a national, sub-regional or regional basis, to further the aims and purposes of the Convention, taking into account the special needs of developing countries in this regard.

(2) On its part, the Organization shall pursue the aforesaid efforts, as appropriate, in consultation or association with other international organizations, particularly the International Labour Organisation.

ARTICLE XII

Amendments

(1) The Convention may be amended by either of the following procedures:

- (a) Amendments after consideration within the Organization:
 - (i) Any amendment proposed by a Party shall be submitted to the Secretary-General, who shall then circulate it to all Members of the

daarvan aan al die Lede van die Organisasie, al die Partye en aan die Direkteur-generaal van die Internasionale Arbeidskantoor moet deurstuur.

- (ii) Elke sodanig voorgestelde en deurgestuurde wysiging moet ter oorweging na die Komitee vir die Veiligheid van Seeliede van die Organisasie verwys word.
- (iii) Partye is daarop geregtig om deel te neem aan die verrigtinge van die Komitee vir die Veiligheid van Seeliede by die oorweging en aanneming van wysigings, hetsy hulle lede van die Organisasie is of nie.
- (iv) Wysigings moet aangeneem word deur 'n tweederdemeerderheid van die Partye wat teenwoordig is en stem in die Komitee vir die Veiligheid van Seeliede soos vergroot ingevolge subparagraaf (a) (iii) (hierna genoem die "vergroute Komitee vir die Veiligheid van Seeliede") op voorwaarde dat minstens een derde van die Partye by die stemming teenwoordig moet wees.
- (v) Die Sekretaris-generaal moet die wysigings wat aldus aangeneem is, aan al die Partye oordra vir aanvaarding.
- (vi) 'n Wysiging van 'n Artikel word geag aangeneem te wees op die datum wanneer dit deur twee derdes van die Partye aanvaar is.
- (vii) 'n Wysiging van die Aanhangsel word geag aanvaar te wees—
 1. aan die einde van twee jaar vanaf die datum waarop dit aan die Partye oorgedra word vir aanvaarding; of
 2. aan die einde van 'n ander tydperk van minstens 'n jaar, indien dit tydens die aanneming daarvan aldus bepaal word deur 'n tweederdemeerderheid van die Partye wat teenwoordig is en stem in die vergrote Komitee vir die Veiligheid van Seeliede.

Nietemin word die wysigings geag nie aanvaar te wees nie indien òf meer as een derde van die Partye òf Partye wie se gekombineerde handelsvlote minstens vyftig persent van die bruto tonnemaat van die wêreld se handelsvloot van skepe van 100 bruto register-ton of groter uitmaak, binne die vasgestelde tydperk die Sekretaris-generaal in kennis stel dat hulle teen die wysiging beswaar aanteken.

- (viii) 'n Wysiging van 'n Artikel tree ses maande na die datum waarop dit geag word aanvaar te wees, in werking ten opsigte van dié Partye wat dit aanvaar het, en ses maande na die datum van die betrokke Party se aanvaarding ten opsigte van elke Party wat dit daarna aanvaar.
- (ix) 'n Wysiging van die Aanhangsel tree ses maande nadat dit geag word aanvaar te wees, in werking ten opsigte van al die Partye, buiten dié wat ingevolge subparagraaf (a) (vii) teen die wysiging beswaar aangeteken het en die beswaar nie teruggetrek het nie. Voor die vasgestelde datum van inwerkingtreding kan enige Party die Sekretaris-generaal in kennis stel dat hy homself daarvan onthef om uitvoering aan sodanige wysiging te gee vir 'n tydperk van hoogstens 'n jaar vanaf die inwerkingtreding daarvan, of vir sodanige langer

Organization, all Parties and the Director-General of the International Labour Office at least six months prior to the consideration;

- (ii) any amendment so proposed and circulated shall be referred to the Maritime Safety Committee of the Organization for consideration;
- (iii) Parties, whether or not Members of the Organization, shall be entitled to participate in the proceedings of the Maritime Safety Committee for consideration and adoption of amendments;
- (iv) amendments shall be adopted by the two-thirds majority of the Parties present and voting in the Maritime Safety Committee expanded as provided for in subparagraph (a) (iii) (hereinafter referred to as the "expanded Maritime Safety Committee") on condition that at least one third of the Parties shall be present at the time of voting;
- (v) amendments so adopted shall be communicated by the Secretary-General to all Parties for acceptance;
- (vi) an amendment to an Article shall be deemed to have been accepted on the date on which it is accepted by two thirds of the Parties;
- (vii) an amendment to the Annex shall be deemed to have been accepted—

1. at the end of two years from the date on which it is communicated to Parties for acceptance; or
2. at the end of a different period, which shall be not less than one year, if so determined at the time of its adoption by a two-thirds majority of the Parties present and voting in the expanded Maritime Safety Committee;

however, the amendments shall be deemed not to have been accepted if within the specified period either more than one third of Parties, or Parties the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant shipping of ships of 100 gross register tons or more, notify the Secretary-General that they object to the amendment;

- (viii) an amendment to an Article shall enter into force with respect to those Parties which have accepted it, six months after the date on which it is deemed to have been accepted, and with respect to each Party which accepts it after that date, six months after the date of that Party's acceptance;
- (ix) an amendment to the Annex shall enter into force with respect to all Parties, except those which have objected to the amendment under subparagraph (a) (vii) and which have not withdrawn such objections, six months after the date on which it is deemed to have been accepted. Before the date determined for entry into force, any Party may give notice to the Secretary-General that it exempts itself from giving effect to that amendment for a period not longer than one year from the date of its

tydperk as wat deur 'n tweederdemeerderheid van die Partye bepaal word wat teenwoordig is en stem in die vergrote Komitee vir die Veiligheid van Seeliede ten tyde van die aanneming van die wysiging.

(b) Wysiging deur 'n konferensie:

- (i) Op versoek van 'n Partye en met die instemming van minstens een derde van die Partye, moet die Organisasie, in samewerking of ooreenstemming met die Direkteur-generaal van die Internasionale Arbeidskantoor, 'n konferensie van Partye belê om wysigings van die Konvensie te oorweeg.
- (ii) Elke wysiging wat by sodanige konferensie aangeneem word deur 'n tweederdemeerderheid van die Partye wat teenwoordig is en stem, moet deur die Sekretaris-generaal aan al die Partye oorgedra word vir aanvaarding.
- (iii) Tensy die konferensie anders besluit, word die wysiging geag aanvaar te wees en tree dit in werking ooreenkomstig die prosedures in onderskeidelik subparagrafe (a) (vi) en (a) (viii) of subparagrafe (a) (vii) en (a) (ix), met dien verstande dat verwysings in dié subparagrafe na die vergrote Komitee vir die Veiligheid van Seeliede gelees moet word asof hulle op die konferensie slaan.

(2) Alle verklarings van aanvaarding van of beswaar teen 'n wysiging, of enige kennisgewing ingevolge paragraaf (1) (a) (ix), moet skriftelik voorgelê word aan die Sekretaris-generaal, wat alle Partye van elke sodanige voorlegging asook van die ontvangsdatum daarvan in kennis moet stel.

(3) Die Sekretaris-generaal moet al die Partye in kennis stel van alle wysigings wat in werking tree, asook van die datum waarop elke sodanige wysiging in werking tree.

ARTIKEL XIII

Ondertekening, bekragtiging, aanvaarding, goedkeuring en toetrede

(1) Die Konvensie bly van 1 Desember 1978 tot 30 November 1979 by die Organisasie se Hoofkwartier beskikbaar vir ondertekening en bly daarna beskikbaar vir toetrede. Enige Staat kan 'n Partye word by wyse van—

- (a) ondertekening sonder voorbehoud wat bekragtiging, aanvaarding of goedkeuring betref; of
- (b) ondertekening onderworpe aan bekragtiging, aanvaarding of goedkeuring gevolg deur bekragtiging, aanvaarding of goedkeuring; of
- (c) toetrede.

(2) Bekragtiging, aanvaarding, goedkeuring of toetrede geskied deur die indiening van 'n dokument te dien effekte by die Sekretaris-generaal.

(3) Die Sekretaris-generaal moet alle State wat die Konvensie onderteken het of daartoe toegetree het sowel as die Direkteur-generaal van die Internasionale Arbeidskantoor in kennis stel van alle ondertekeninge en van die indiening van alle dokumente van bekragtiging, aanvaarding, goedkeuring of toetrede en van die datum van elke sodanige indiening.

ARTIKEL XIV

Inwerkingtreding

(1) Die Konvensie tree in werking twaalf maande na die datum waarop minstens vyf en twintig State wie se gekombineerde handelsvloete minstens vyftig persent van die bruto tonnemaat van die wêreld se handelsvloot van skeep van

entry into force, or for such longer period as may be determined by a two thirds majority of the Parties present and voting in the expanded Maritime Safety Committee at the time of the adoption of the amendment; or

(b) amendment by a conference:

- (i) Upon the request of a Party concurred in by at least one third of the Parties, the Organization shall convene, in association or consultation with the Director-General of the International Labour Office, a conference of Parties to consider amendments to the Convention;
- (ii) every amendment adopted by such a conference by a two thirds majority of the Parties present and voting shall be communicated by the Secretary-General to all Parties for acceptance;
- (iii) unless the conference decides otherwise, the amendment shall be deemed to have been accepted and shall enter into force in accordance with the procedures specified in subparagraphs (a) (vi) and (a) (viii) or subparagraphs (a) (vii) and (a) (ix) respectively, provided that references in these subparagraphs to the expanded Maritime Safety Committee shall be taken to mean references to the conference.

(2) Any declaration of acceptance of, or objection to, an amendment or any notice given under paragraph (1) (a) (ix) shall be submitted in writing to the Secretary-General, who shall inform all Parties of any such submission and the date of its receipt.

(3) The Secretary-General shall inform all Parties of any amendments which enter into force, together with the date on which each such amendment enters into force.

ARTICLE XIII

Signature, ratification, acceptance, approval and accession

(1) The Convention shall remain open for signature at the Headquarters of the Organization from 1 December 1978 until 30 November 1979 and shall thereafter remain open for accession. Any State may become a Party by—

- (a) signature without reservation as to ratification, acceptance or approval; or
- (b) signature subject to ratification, acceptance or approval, followed by ratification, acceptance or approval; or
- (c) accession.

(2) Ratification, acceptance, approval or accession shall be effected by the deposit of an instrument to that effect with the Secretary-General.

(3) The Secretary-General shall inform all States that have signed the Convention or acceded to it and the Director-General of the International Labour Office of any signature or of the deposit of any instrument of ratification, acceptance, approval or accession and the date of its deposit.

ARTICLE XIV

Entry into force

(1) The Convention shall enter into force twelve months after the date on which not less than twenty-five States, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant shipping of ships of 100 gross register tons or more, have

100 bruto registerton of groter uitmaak, dit òf onderteken het sonder voorbehoud wat bekragting, aanvaarding of goedkeuring betref òf die vereiste dokumente van bekragting, aanvaarding, goedkeuring of toetreding ooreenkomstig Artikel XIII ingedien het.

(2) Die Sekretaris-generaal moet al die State wat die Konvensie onderteken het of daartoe toegetree het, in kennis stel van die datum waarop dit in werking tree.

(3) 'n Dokument van bekragting, aanvaarding, goedkeuring of toetreding ingedien gedurende die twaalf maande vermeld in paragraaf (1), word van krag by die inwerking-treding van die Konvensie of drie maande na die indiening van sodanige dokument, na gelang van watter datum die laatste is.

(4) 'n Dokument van bekragting, aanvaarding, goedkeuring of toetreding wat ingedien word ná die datum waarop die Konvensie in werking tree, word van krag drie maande na die indiening daarvan.

(5) Na die datum waarop 'n wysiging geag word aanvaar te wees ooreenkomstig Artikel XII, is elke dokument van bekragting, aanvaarding, goedkeuring of toetreding wat ingedien word, van toepassing op die gewysigde Konvensie.

ARTIKEL XV

Opsegging

(1) Die Konvensie kan te eniger tyd deur 'n Party opgesê word na verloop van vyf jaar van die datum af waarop die Konvensie vir die Party in werking getree het.

(2) Opsegging moet geskied by wyse van skriftelike kennisgewing aan die Sekretaris-generaal, wat al die ander Partye en die Direkteur-generaal van die Internasionale Arbeidskantoor in kennis moet stel van die kennisgewing wat ontvang is, van die ontvangsdatum daarvan en van die datum waarop sodanige opsegging van krag word.

(3) 'n Opsegging word van krag twaalf maande na ontvangens van die opseggingskennisgewing deur die Sekretaris-generaal of na sodanige langer tydperk as wat in die kennisgewing aangedui word.

ARTIKEL XVI

Bewaring en registrasie

(1) Die Konvensie moet vir bewaring ingedien word by die Sekretaris-generaal, wat gewaarmerkte ware afskrifte daarvan moet stuur aan al die State wat die Konvensie onderteken het of daartoe toegetree het.

(2) Sodra die Konvensie in werking tree, moet die Sekretaris-generaal die teks aan die Sekretaris-generaal van die Verenigde Nasies oordra vir registrasie en publikasie ooreenkomstig Artikel 102 van die Handves van die Verenigde Nasies.

ARTIKEL XVII

Tale

Die Konvensie is in een eksemplaar opgestel in Chinees, Engels, Frans, Russies en Spaans, met elke teks ewe outentiek. Amptelike vertalings moet in Arabies en Duits gedoen en saam met die ondertekende oorspronklike vir bewaring ingedien word.

either signed it without reservation as to ratification, acceptance or approval or deposited the requisite instruments of ratification, acceptance, approval or accession in accordance with Article XIII.

(2) The Secretary-General shall inform all States that have signed the Convention or acceded to it of the date on which it enters into force.

(3) Any instrument of ratification, acceptance, approval or accession deposited during the twelve months referred to in paragraph (1) shall take effect on the coming into force of the Convention or three months after the deposit of such instrument, whichever is the later date.

(4) Any instrument of ratification, acceptance, approval or accession deposited after the date on which the Convention enters into force shall take effect three months after the date of deposit.

(5) After the date on which an amendment is deemed to have been accepted under Article XII, any instrument of ratification, acceptance, approval or accession deposited shall apply to the Convention as amended.

ARTICLE XV

Denunciation

(1) The Convention may be denounced by any Party at any time after five years from the date on which the Convention entered into force for that Party.

(2) Denunciation shall be effected by notification in writing to the Secretary-General who shall inform all other Parties and the Director-General of the International Labour Office of any such notification received and of the date of its receipt as well as the date on which such denunciation takes effect.

(3) A denunciation shall take effect twelve months after receipt of the notification of denunciation by the Secretary-General or after any longer period which may be indicated in the notification.

ARTICLE XVI

Deposit and registration

(1) The Convention shall be deposited with the Secretary-General who shall transmit certified true copies thereof to all States that have signed the Convention or acceded to it.

(2) As soon as the Convention enters into force, the Secretary-General shall transmit the text to the Secretary-General of the United Nations for registration and publication, in accordance with Article 102 of the Charter of the United Nations.

ARTICLE XVII

Languages

The Convention is established in a single copy in the Chinese, English, French, Russian and Spanish languages, each text being equally authentic. Official translations in the Arabic and German languages shall be prepared and deposited with the signed original.

IN WITNESS WHEREOF the undersigned, being duly authorized by their respective Governments for that purpose, have signed the Convention.*

DONE AT LONDON this Seventh day of July, One thousand Nine hundred and Seventy-eight.

AANHANGSEL

HOOFTUK I

ALGEMENE BEPALINGS

Regulasie I/1

Woordomskrywings

Vir die toepassing van die Konvensie, tensy uitdruklik anders bepaal, beteken—

- (a) "Regulasies" Regulasies vervat in die Aanhangsel van die Konvensie;
- (b) "goedgekeur" goedgekeur deur die Administrasie;
- (c) "gesagvoerder" 'n persoon in bevel van 'n skip;
- (d) "offisier" 'n lid van die bemanning, buiten die gesagvoerder, wat as sodanig betitel word in landswette of -regulasies, of by afwesigheid van sodanige betiteling, deur kollektiewe instemming of gebruik;
- (e) "dekoffisier" 'n gekwalifiseerde offisier in die dekadefdeling;
- (f) "hoofstuurman" die dekkoffisier tweede in rang na die gesagvoerder en op wie die bevel van die skip sal oorgaan ingeval die gesagvoerder buite staat gestel word;
- (g) "ingenieuroffisier" 'n gekwalifiseerde offisier in die ingenieursafdeling;
- (h) "hoofingenieuroffisier" die senior ingenieuroffisier verantwoordelik vir die meganiese aandrywing van die skip;
- (i) "tweede ingenieuroffisier" die ingenieuroffisier tweede in rang na die hoofingenieuroffisier en op wie die verantwoordelikheid vir die meganiese aandrywing van die skip sal oorgaan ingeval die hoofingenieuroffisier buite staat gestel word;
- (j) "assistent-ingenieuroffisier" 'n persoon in opleiding as ingenieuroffisier en sodanig betitel deur landswette of -regulasies;
- (k) "radio-offisier" 'n persoon wat beskik oor 'n eerste-klas- of tweedeklas-radiotelegraafbedienersertifikaat of 'n algemene sertifikaat vir radiotelekommunikasiebedieners vir die maritieme mobiele diens uitgereik kragtens die bepalings van die Radioregulasies, wat in diens is in die radiotelegraafstasie van 'n skip wat ingevolge die Internasionale Konvensie vir die Beveiliging van Menselewens op See sodanige stasie moet hê;
- (l) "radiotelefonis" die houder van 'n toepaslike sertifikaat uitgereik ingevolge die bepalings van die Radioregulasies;
- (m) "matroos" 'n ander lid van 'n skip se bemanning as die gesagvoerder of 'n offisier;
- (n) "kusvaart" vaarte in die nabyheid van 'n Party soos omskryf deur die betrokke Party;
- (o) "aandrywingskrag" die krag in kilowatt wat op die skip se Registrasiesertifikaat of ander amptelike dokument verskyn*;

* Daar word aangeneem dat die krag wat aldus op die Registrasiesertifikaat of ander amptelike dokument verskyn, die totale maksimum volgehoue kragleweringvermoë van al die skip se hoofaandrywingsmasjinerie is.

ANNEX

CHAPTER I

GENERAL PROVISIONS

Regulation I/1

Definitions

For the purpose of this Convention, unless expressly provided otherwise:—

- (a) "Regulations" means Regulations contained in the Annex to the Convention;
- (b) "approved" means approved by the Administration;
- (c) "master" means the person having command of a ship;
- (d) "officer" means a member of the crew, other than the master, designated as such by national law or regulations or in the absence of such designation by collective agreement or custom;
- (e) "deck officer" means a qualified officer in the deck department;
- (f) "chief mate" means the deck officer next in rank to the master and upon whom the command of the ship will fall in the event of the incapacity of the master;
- (g) "engineer officer" means a qualified officer in the engine department;
- (h) "chief engineer officer" means the senior engineer officer, responsible for the mechanical propulsion of the ship;
- (i) "second engineer officer" means the engineer officer next in rank to the chief engineer officer and upon whom the responsibility for the mechanical propulsion of the ship will fall in the event of the incapacity of the chief engineer officer;
- (j) "assistant engineer officer" means a person under training to become an engineer officer and designated as such by national law or regulations;
- (k) "radio officer" means a person holding a first class or second class radiotelegraph operator's certificate or a radiocommunication operator's general certificate for the maritime mobile service issued under the provisions of the Radio Regulations, who is employed in the radiotelegraph station of a ship which is required to have such a station by the International Convention for the Safety of Life at Sea;
- (l) "radiotelephone operator" means a person holding an appropriate certificate issued under the provisions of the Radio Regulations;
- (m) "rating" means a member of the ship's crew other than the master or an officer;
- (n) "near-coastal voyages" means voyages in the vicinity of a Party as defined by that party;
- (o) "propulsion power" means the power in kilowatts which appears on the ship's Certificate of Registry or other official document*;

* It is assumed that the power so appearing on the Certificate of Registry or other official document is the total maximum continuous rated output power of all the ship's main propulsion machinery.

- (p) "radiodienste" ook, na gelang van die geval, waghou en die tegniese onderhoud en herstelwerk ooreenkomstig die Radioregulasies, die Internasionale Konvensie vir die Beveiliging van Menselewers ter See en, na goeddunke van elke Administrasie, die toepaslike IMCO-aanbevelings;
- (q) "olietenkskip" 'n skip gebou en gebruik vir die losmaatvervoer van petroleum en petroleumprodukte;
- (r) "chemiese tenkskip" 'n skip gebou en gebruik vir die losmaatvervoer van enige vloeibare chemikalieë gelys in IMCO se "Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk";
- (s) "vloeigastenskip" 'n skip gebou en gebruik vir die losmaatvervoer van enige vloeibare gas gelys in IMCO se "Code for the Construction and Equipment of Ships carrying Liquefied Gases in Bulk".

Regulasie I/2

Inhoud van sertifikate en vorm van endossering

1. Sertifikate moet in die amptelike taal of tale van die betrokke land uitgereik word. As die taal nie Engels is nie, moet die teks 'n vertaling in Engels insluit.
2. Met betrekking tot radio-offisiere en radiotelefoniste, kan Administrasies—
 - (a) die bykomende kennis insluit wat vereis word deur die betrokke Regulasies van die Aanhangsel van die Konvensie by die eksaminering vir die uitreiking van 'n sertifikaat wat aan die Radioregulasies voldoen; of
 - (b) 'n afsonderlike sertifikaat uitreik wat aandui dat die houer daarvan oor die bykomende kennis beskik wat deur die Aanhangsel van die Konvensie vereis word.
3. Die sertifikaatendossering wat deur Artikel VI van die Konvensie vereis word, moet in die volgende vorm wees:

Vorm van endossering van sertifikate

ENDOSSERING VAN CERTIFIKATE

(Amptelike Seël)

(Land)

Uitgereik kragtens die bepalings van die

INTERNASIONALE KONVENSIË INSAKE STANDAARDE VAN OPLEIDING, DIPLOMERING EN WAGHOU VIR SEEVAARDERS, 1978

- * { Die Regering van (Naam) sertifiseer
- Ek, die ondergetekende, sertifiseer

dat die huidige Sertifikaat/Sertifikaat No.**, uitgereik word aan(volle naam van persoon), wat behoorlik bevoeg bevind is ooreenkomstig die bepalings van Regulasie van die Internasionale Konvensie insake Standaard van Opleiding, Diplomerings en Waghous vir Seevaarders, 1978, as*** met slegs die volgende beperkings:

Vul hier die beperkings of "geen" in, na gelang van die geval

Uitreikingsdatum van hierdie endossering.....

(Amptelike Seël)

Handtekening
(Naam en handtekening van behoorlik gemagtigde beampte)

Geboortedatum van die houer van die sertifikaat.....

Handtekening van die houer van die sertifikaat.....

* Gebruik die een of die ander reël.
** Skrap soos toepaslik.
*** Vul die Konvensiegradering of klas sertifikaat in.

- (p) "Radio duties" include, as appropriate, watchkeeping and technical maintenance and repairs in accordance with the Radio Regulations, The International Convention for the Safety of Life at Sea and, at the discretion of each Administration, the relevant IMCO recommendations;
- (q) "oil tanker" means a ship constructed and used for the carriage of petroleum and petroleum products in bulk;
- (r) "chemical tanker" means a ship constructed and used for the carriage in bulk of any liquid chemical listed in the IMCO "Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk";
- (s) "liquefied gas tanker" means a ship constructed and used for the carriage in bulk of any liquefied gas listed in the IMCO "Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk".

Regulation I/2

Content of certificates and form of endorsement

1. Certificates shall be in the official language or languages of the issuing country. If the language used is not English, the text shall include a translation into that language.
2. In respect of radio officers and radiotelephone operators, Administrations may—
 - (a) include the additional knowledge required by the relevant Regulations of the Annex to the Convention in the examination for the issue of a certificate complying with the Radio Regulations; or
 - (b) issue a separate certificate indicating that the holder has the additional knowledge required by the Annex to the Convention.
3. The form of certificate endorsement required by Article VI of the Convention shall be as follows:

Form of endorsement of certificates

ENDORSEMENT OF CERTIFICATES

(Official Seal)

(Country)

Issued under the provisions of the

INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS, 1978

- Either* { The Government of (Name) certifies
- I, the undersigned certify

that the present Certificate/Certificate No.**, is issued to(full name of person), who has been found duly qualified in accordance with the provisions of Regulation ... of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as*** with the following limitations only:

Insert here limitations or "none" as appropriate

Date of issue of this endorsement.....

(Official Seal)

Signed
(Name and signature of duly authorized official)

Date of birth of the holder of the certificate.....

Signature of the holder of the certificate.....

* Use one line or the other.
** Delete as appropriate.
*** Insert Convention grade or class of certificate.

Regulasie I/3

Beginsels wat vir kusvaarte geld

1. 'n Party wat kusvaarte omskryf vir die doeleindes van die Konvensie mag seevaarders in diens aan boord van die skeep wat daarop geregtig is om onder die vlag van 'n ander Party te vaar en wat sulke vaarte onderneem, nie vereistes oplê rakende opleiding, ondervinding of diplomering op so 'n wyse dat dit vir sodanige seevaarders neerkom op strenger vereistes as vir seevaarders in diens aan boord van skeep wat daarop geregtig is om onder sy eie vlag te vaar nie. In geen geval mag enige sodanige Party vereistes oplê aan seevaarders in diens aan boord van skeep wat daarop geregtig is om onder die vlag van 'n ander Party te vaar wat dié van die Konvensie oorskry ten opsigte van skeep wat nie op kusvaarte gebruik word nie.

2. Ten opsigte van skeep wat daarop geregtig is om onder die vlag te vaar van 'n Party wat gereeld op kusvaarte langs die kus van 'n ander Party gebruik word, moet die Party onder wie se vlag die skip geregtig is om te vaar, vereistes met betrekking tot opleiding, ondervinding en sertifisering voorskryf vir seevaarders in diens op sodanige skeep wat ten minste gelykstaande is met dié van die Party langs wie se kus die skip gebruik word, met dien verstande dat hulle nie die vereistes van die Konvensie oorskry met betrekking tot skeep wat nie op kusvaarte gebruik word nie. 'n Skip wat sy reis verleng tot buite dit wat deur 'n Party omskryf is as 'n kusvaart en wat waters binnevaar wat nie deur dié omskrywing gedek word nie, moet aan die vereistes van die Konvensie voldoen sonder verslapping ingevolge hierdie Regulasie.

3. 'n Party kan 'n skip wat geregtig is om onder sy vlag te vaar die voordele verleen van die kusvaartbepalings van die Konvensie wanneer dit gereeld gebruik word langs die kus van 'n nie-Party op kusvaarte soos omskryf deur die Party.

4. Niks in hierdie Regulasie beperk die jurisdiksie van enige Staat engsins nie, hetsy 'n Party by die Konvensie of nie.

Regulasie I/4

Kontrolleringsprosedures

1. Kontrole uitgeoefen deur 'n behoorlik gemagtigde kontrolebeampte kragtens Artikel X word tot die volgende beperk:

- (a) Kontrolering ooreenkomstig Artikel X(1) dat alle seevaarders in diens aan boord wat ingevolge die Konvensie gediplomeer moet wees, oor 'n geldige sertifikaat of geldige vrystelling beskik;
- (b) die bepaling van die vermoë van die seevaarders van die skip om die waghoutstandaarde vereis deur die Konvensie te handhaaf indien daar rede is om te glo dat sodanige standarde nie gehandhaaf word nie omdat die volgende in die hawe van 'n Party of in die toegange tot die hawe gebeur het:
 - (i) Die skip was betrokke in 'n botsing, het grond geraak of gestrand; of
 - (ii) daar was 'n storting van stowwe uit die skip terwyl dit varende, voor anker of vasgemeer was wat onwettig is ingevolge internasionale konvensies; of
 - (iii) die skip is op onseker of onveilige wyse gemanoeuvreer of het hom nie gehou by koerspeilbakens of roeteskemmas vir skeepsverkeer nie.

2. Die kontrolebeampte moet die gesagvoerder van die skip en die betrokke verteenwoordiger van die vlagstaat ooreenkomstig Artikel X skriftelik in kennis stel indien enige van die volgende tekortkominge aan die lig kom as gevolg van kontrolleringsoptrede ooreenkomstig paragraaf 1:

- (a) Die versuim van seevaarders wat oor 'n sertifikaat moet beskik om 'n toepaslike geldige sertifikaat of geldige vrystelling te hê;

Regulation I/3

Principles governing near-coastal voyages

1. Any Party defining near-coastal voyages for the purpose of the Convention shall not impose training, experience or certification requirements on the seafarers serving on board the ships entitled to fly the flag of another Party and engaged on such voyages in a manner resulting in more stringent requirements for such seafarers than for seafarers serving on board ships entitled to fly its own flag. In no case shall any such Party impose requirements in respect of seafarers serving on board ships entitled to fly the flag of another Party in excess of those of the Convention in respect of ships not engaged on near-coastal voyages.

2. With respect to ships entitled to fly the flag of a Party regularly engaged on near-coastal voyages off the coast of another Party, the Party whose flag the ship is entitled to fly shall prescribe training, experience and certification requirements for seafarers serving on such ships at least equal to those of the Party off whose coast the ship is engaged, provided that they do not exceed the requirements of the Convention in respect of ships not engaged on near-coastal voyages. A ship which extends its voyage beyond what is defined as a near-coastal voyage by a Party and enters waters not covered by that definition shall fulfil the requirements of the Convention without relaxation under this Regulation.

3. A Party may afford a ship which is entitled to fly its flag the benefits of the near-coastal voyages provisions of the Convention when it is regularly engaged off the coast of a non-Party on near coastal voyages as defined by the Party.

4. Nothing in this Regulation shall in any way limit the jurisdiction of any State, whether or not a Party to the Convention.

Regulation I/4

Control procedures

1. Control exercised by a duly authorized control officer under Article X shall be limited to the following:

- (a) Verification in accordance with Article X (1) that all seafarers serving on board who are required to be certificated by the Convention hold a valid certificate or a valid dispensation;
- (b) assessment of the ability of the seafarers of the ship to maintain watchkeeping standards as required by the Convention if there are grounds for believing that such standards are not being maintained because, while in the port of a Party or in the approaches to that Port, the following have occurred:
 - (i) The ship has been involved in a collision, grounding or stranding; or
 - (ii) there has been a discharge of substances from the ship when underway, at anchor or at berth which is illegal under international conventions; or
 - (iii) the ship has been manoeuvred in an erratic or unsafe manner or navigational course markers or traffic separation schemes have not been followed.

2. The control officer shall provide written information to the master of the ship and the appropriate representative of the flag State according to Article X if, as a result of control action taken in accordance with paragraph 1, any of the following deficiencies are revealed:

- (a) Failure of seafarers, required to hold a certificate, to have an appropriate valid certificate or valid dispensation;

- (b) navigasie- of ingenieurswagreëlings wat nie voldoen aan die vlagstaat se vereistes vir die skip nie;
- (c) die afwesigheid tydens 'n wagbeurt van 'n persoon wat gekwalifiseer is om toerusting te bedien wat noodsaaklik vir veilige navigasie of die voorkoming van besoedeling is;
- (d) die onvermoë van die gesagvoerder om uitgeruste persone vir die eerste wag by die aanvang van 'n reis en daaropvolgende afloswagte te verskaf.

3. Versuim om die tekortkominge reg te stel bedoel in paragraaf 2 (a)—in die mate waarin dit betrekking het op die sertifikate van die gesagvoerder, hoofingenieur-offisier en offisiere in bevel van navigasie- en ingenieurswagte en, waar toepaslik, die radio-offisier—en in paragraaf 2 (b), is die enigste gronde ingevolge Artikel X waarop 'n Party 'n skip kan aanhou.

HOOFSTUK II

GESAGVOERDER—DEKAFDELING

Regulasie II/1

Grondbeginsels waaraan gehou moet word by navigasiewaghouding

1. Partye moet die aandag van skeepseienaars, skeepsebruikers, gesagvoerders en wagspersoneel vestig op die volgende beginsels waaraan gehou moet word om te verseker dat 'n veilige navigasiewag te alle tye gehandhaaf word.

2. Die gesagvoerder van elke skip is verplig om te verseker dat wagreëlings voldoende is vir die handhawing van 'n veilige navigasiewag. Onder die gesagvoerder se algemene bevel is die offisiere van die wag verantwoordelik vir die veilige navigering van die skip gedurende hulle dienste wanneer hulle veral daarop ingestel moet wees om botsing en stranding te voorkom.

3. Met die grondbeginsels, insluitende die volgende maar nie daartoe beperk nie, moet daar op alle skepe rekening gehou word.

4. Wagdiensreëlings.

(a) Die samestelling van die wag moet te alle tye voldoende en gepas wees ooreenkomstig die heersende omstandighede en toestande en moet die behoefte aan die handhawing van 'n behoorlike uitkykwag in ag neem.

(b) By die oorweging van die samestelling van die wag op die brug, wat geskikte dekmatrose kan insluit, moet daar met onder andere die volgende faktore rekening gehou word:

- (i) Die brug mag nooit onbewaak gelaat word nie;
- (ii) weerstoestande, sig en of daar daglig of duisternis is;
- (iii) die nabyheid van navigasiegefare wat dit vir die offisier in bevel van die wag nodig mag maak om bykomende navigasiepligte uit te voer;
- (iv) die gebruik en werkendetoestand van navigasiehulpmiddels soos radar of elektroniese posisiebepalings-toestelle en enige ander toerusting wat die veilige navigasie van die skip raak;
- (v) of die skip met 'n outomatiese stuurstelsel toegerus is of nie;
- (vi) enige buitengewone eise aan die navigasiewag wat mag voortspruit uit spesiale operasionele toestande.

5. Bekwaamheid vir diens.

Die wagstelsel moet sodanig wees dat die waghouvermoë van wagoffisiere en wagmatrose nie deur vermoedheid aangetas word nie. Pligte moet so georganiseer word dat die eerste wag by die aanvang van 'n vaart en die daaropvolgende afloswagte genoegsaam uitgerus en andersins geskik vir diens is.

- (b) failure of navigational or engineering watch arrangements to conform to the requirements specified for the ship by the flag State;
- (c) absence in a watch of a person qualified to operate equipment essential to safe navigation or the prevention of pollution;
- (d) inability of the master to provide rested persons for the first watch at the commencement of a voyage and subsequent relieving watches.

3. Failures to correct the deficiencies referred to in paragraph 2 (a)—to the extent that they relate to the certificates of the master, chief engineer officer and officers in charge of navigational and engineering watches and, where relevant, the radio officer—and in paragraph 2 (b), shall be the only grounds under Article X on which a Party may detain a ship.

CHAPTER II

MASTER—DECK DEPARTMENT

Regulation II/1

Basic principles to be observed in keeping a navigational watch

1. Parties shall direct the attention of shipowners, ship operators, masters and watchkeeping personnel to the following principles which shall be observed to ensure that a safe navigational watch is maintained at all times.

2. The master of every ship is bound to ensure that watchkeeping arrangements are adequate for maintaining a safe navigational watch. Under the master's general direction, the officers of the watch are responsible for navigating the ship safely during their periods of duty when they will be particularly concerned with avoiding collision and stranding.

3. The basic principles, including but not limited to the following, shall be taken into account on all ships.

4. Watch arrangements.

(a) The composition of the watch shall at all times be adequate and appropriate to the prevailing circumstances and conditions and shall take into account the need for maintaining a proper look-out.

(b) When deciding the composition of the watch on the bridge which may include appropriate deck ratings, the following factors, *inter alia*, shall be taken into account:

- (i) At no time shall the bridge be left unattended;
- (ii) weather conditions, visibility and whether there is daylight or darkness;
- (iii) proximity of navigational hazards which may make it necessary for the officer in charge of the watch to carry out additional navigational duties;
- (iv) use and operational condition of navigational aids such as radar or electronic position-indicating devices and any other equipment affecting the safe navigation of the ship;
- (v) whether the ship is fitted with automatic steering;
- (vi) any unusual demands on the navigational watch that may arise as a result of special operational circumstances.

5. Fitness for duty.

The watch system shall be such that the efficiency of watchkeeping officers and watchkeeping ratings is not impaired by fatigue. Duties shall be so organized that at first watch at the commencement of a voyage and the subsequent relieving watches are sufficiently rested and otherwise fit for duty.

6. Navigasie.

(a) Die voorgenome vaart moet vooraf beplan word met inagneming van alle ter sake inligting, en enige koers waarop besluit word, moet nagegaan word voordat die vaart begin.

(b) Gedurende die wag moet die koers waarin gestuur word, die posisie en die spoed met kort genoeg tussenpose nagegaan word, deur gebruik te maak van alle beskikbare navigasihulpmiddels wat nodig is, om te verseker dat die skip die beplande koers volg.

(c) Die offisier van die wag moet volle kennis dra van die plasing en werking van alle veiligheids- en navigasietoerusting aan boord van die skip en moet bewus wees van en ag slaan op die bedryfsbeperkings van sodanige toerusting.

(d) Die offisier in bevel van 'n navigasiewag mag geen pligte opgedra word of onderneem wat inbreuk kan maak op die veilige navigasie van die skip nie.

7. Navigasietoerusting.

(a) Die offisier van die wag moet al die navigasietoerusting tot sy beskikking op die doeltreffendste wyse aanwend.

(b) Met die gebruik van radar moet die offisier van die wag die noodsaaklikheid daarvan in gedagte hou om te alle tye te voldoen aan die bepalings rakende die gebruik van radar vervat in die toepaslike regulasies vir die voorkoming van botsings ter see.

(c) In noodgevalle moet die offisier van die wag nie huiwer om die roer, masjiene en klankseinapparaat te gebruik nie.

8. Navigasiepligte en -verantwoordelikhede.

(a) Die offisier in bevel van die wag moet—

- (i) sy wag hou op die brug, wat hy in geen omstandighede mag verlaat voordat hy behoorlik afgelos is nie;
- (ii) steeds verantwoordelik bly vir die veilige navigasie van die skip, ondanks die teenwoordigheid van die gesagvoerder op die brug, totdat die gesagvoerder hom uitdruklik meedeel dat hy daardie verantwoordelikhede oorgeneem en dit oor en weer verstaan word;
- (iii) die gesagvoerder in kennis stel wanneer hy twyfel oor watter stappe hy in die belang van veiligheid moet doen;
- (iv) nie die wag aan die aflosoffisier oordra indien hy gronde het om te glo dat laasgenoemde klaarblyklik nie in staat is om sy pligte doeltreffend uit te voer nie, in welke geval hy die gesagvoerder dienoreenkomstig in kennis moet stel.

(b) By oornam van die wag moet die aflosoffisier hom vergewis van die skip se beraamde of ware posisie en sy beplande roete, koers en spoed bevestig en kennis neem van alle navigasiegevaare wat na verwagting tydens sy wag teëgekome kan word.

(c) 'n Behoorlike rekord moet gedurende die wag gehou word van die bewegings en werksaamhede wat verband hou met die navigasie van die skip.

9. Uitkykwag.

Benewens die handhawing van 'n behoorlike uitkykwag ten einde die risiko van botsing, stranding en ander navigasiegevaare ten volle te takseer, sluit die pligte van die uitkykwag die opsporing in van skepe of lugvaartuie in nood, drenkelinge, wrakke en dryfgoed. Met die handhawing van 'n uitkykwag moet die volgende nagekom word:

- (a) Die uitkykwag moet sy volle aandag daaraan kan wy om behoorlik op die uitkyk te wees en geen ander pligte onderneem of opgedra word wat hierdie taak kan belemmer nie;

6. Navigation.

(a) The intended voyage shall be planned in advance taking into consideration all pertinent information and any course laid down shall be checked before the voyage commences.

(b) During the watch the course steered, position and speed shall be checked at sufficiently frequent intervals, using any available navigational aids necessary, to ensure that the ship follows the planned course.

(c) The officer of the watch shall have full knowledge of the location and operation of all safety and navigational equipment on board the ship and shall be aware and take account of the operating limitations of such equipment.

(d) The officer in charge of a navigational watch shall not be assigned or undertake any duties which would interfere with the safe navigation of the ship.

7. Navigational equipment.

(a) The officer of the watch shall make the most effective use of all navigational equipment at his disposal.

(b) When using radar, the officer of the watch shall bear in mind the necessity to comply at all times with the provisions on the use of radar contained in the applicable regulations for preventing collisions at sea.

(c) In cases of need the officer of the watch shall not hesitate to use the helm, engines and sound signalling apparatus.

8. Navigational duties and responsibilities.

(a) The officer in charge of the watch shall—

- (i) keep his watch on the bridge which he shall in no circumstances leave until properly relieved;
- (ii) continue to be responsible for the safe navigation of the ship, despite the presence of the master on the bridge, until the master informs him specifically that he has assumed that responsibility and this is mutually understood;
- (iii) notify the master when in any doubt as to what action to take in the interest of safety;
- (iv) not hand over the watch to the relieving officer if he has reason to believe that the latter is obviously not capable of carrying out his duties effectively, in which case he shall notify the master accordingly.

(b) On taking over the watch the relieving officer shall satisfy himself as to the ship's estimated or true position and confirm its intended track, course and speed and shall note any dangers to navigation expected to be encountered during his watch.

(c) A proper record shall be kept of the movements and activities during the watch relating to the navigation of the ship.

9. Look-out.

In addition to maintaining a proper look-out for the purpose of fully appraising the situation and the risk of collision, stranding and other dangers to navigation, the duties of the look-out shall include the detection of ships or aircraft in distress, shipwrecked persons, wrecks and debris. In maintaining a look-out the following shall be observed.

- (a) The look-out must be able to give full attention to the keeping of a proper look-out and no other duties shall be undertaken or assigned which could interfere with that task;

(b) die uitkykwag en stuurman het afsonderlike pligte en die stuurman moet nie geag word op die uitkyk te wees terwyl hy stuur nie, uitgesonderd op klein skepe waar 'n onbelemmerde uitsig in alle rigtings by die stuurposisie verskaf word en waar daar geen benadeling deur donkersig of ander hindernisse vir die handhawing van 'n behoorlike uitkykwag is nie. Die offisier in bevel van die wag kan in die daglig die enigste uitkykwag wees, op voorwaarde dat by elke sodanige geleentheid—

- (i) die situasie sorgvuldig getakseer is en daar sonder twyfel vasgestel is dat sodanige reëling veilig is;
- (ii) volle rekening gehou is met alle relevante faktore, insluitende die volgende maar nie daartoe beperk nie:
 - Weerstoestand,
 - sig,
 - verkeersdigtheid,
 - nabyheid van navigasiegevaar,
 - die aandag wat nodig is wanneer daar in of naby roetesemas vir skeepsverkeer gevaar word;
- (iii) bystand beskikbaar is wat onmiddellik na die brug ontbied kan word wanneer 'n verandering in die situasie dit nodig maak.

10. Navigasie met loods aan boord.

Ondanks die pligte en verpligtinge van 'n loods, onthef sy teenwoordigheid aan boord nie die gesagvoerder of offisier in bevel van die wag van hulle pligte en verpligtinge vir die veiligheid van die skip nie. Die gesagvoerder en die loods moet inligting uitruil betreffende navigasieprosedures, plaaslike toestande en die skip se eienskappe. Die gesagvoerder en offisier van die wag moet met die loods nou saamwerk en 'n akkurate kontrolering handhaaf van die skip se posisie en beweging.

11. Beskerming van die mariene omgewing.

Die gesagvoerder en offisier in bevel van die wag moet bewus wees van die ernstige uitwerking van operasionele of aksidentele besoedeling van die mariene omgewing en moet alle moontlike voorsorgmaatreëls tref om sodanige besoedeling te voorkom, veral binne die raamwerk van toepaslike internasionale en haweregulasies.

Regulasie II/2

Verpligte minimum vereistes vir die diplomering van gesagvoerders en hoofstuurmanne van skepe van 200 bruto registerton of groter

Gesagvoerder en hoofstuurman van skepe van 1 600 bruto registerton of groter

1. Elke gesagvoerder en hoofstuurman van 'n seeskop van 1 600 bruto registerton of groter moet oor 'n toepaslike sertifikaat beskik.
2. Elke kandidaat vir diplomering moet—
 - (a) die Administrasie oortuig van sy mediese geskiktheid, veral betreffende gesig en gehoor;
 - (b) aan die vereistes voldoen vir diplomering as 'n offisier in bevel van 'n navigasiewag op skepe van 200 bruto registerton of groter en goedgekeurde diens op see in daardie hoedanigheid agter die rug hê:
 - (i) vir diplomering as hoofstuurman, minstens 18 maande; dié tydperk kan egter verminder word tot minstens 12 maande indien die Administrasie spesiale opleiding vereis wat hy as die ekwivalent beskou van minstens ses maande se diens as offisier in bevel van 'n navigasiewag;

(b) the duties of the look-out and helmsman are separate and the helmsman shall not be considered to be the look-out while steering, except in small ships where an unobstructed all-round view is provided at the steering position and there is no impairment of night vision or other impediment to the keeping of a proper look-out. The officer in charge of the watch may be the sole look-out in daylight provided that on each such occasion—

- (i) the situation has been carefully assessed and it has been established without doubt that it is safe to do so;
- (ii) full account has been taken of all relevant factors including, but not limited to—
 - state of weather,
 - visibility,
 - traffic density,
 - proximity of danger to navigation,
 - the attention necessary when navigating in or near traffic separation schemes;
- (iii) assistance is immediately available to be summoned to the bridge when any change in the situation so requires.

10. Navigation with pilot embarked.

Despite the duties and obligations of a pilot, his presence on board does not relieve the master or officer in charge of the watch from their duties and obligations for the safety of the ship. The master and the pilot shall exchange information regarding navigation procedures, local conditions and the ship's characteristics. The master and officer of the watch shall co-operate closely with the pilot and maintain an accurate check of the ship's position and movement.

11. Protection of the marine environment.

The master and officer in charge of the watch shall be aware of the serious effects of operational or accidental pollution of the marine environment and shall take all possible precautions to prevent such pollution, particularly within the framework of relevant international and port regulations.

Regulation II/2

Mandatory minimum requirements for certification of masters and chief mates of ships of 200 gross register tons or more

Master and chief mate of ships of 1 600 gross register tons or more

1. Every master and chief mate of a sea-going ship of 1 600 gross register tons or more shall hold an appropriate certificate.
2. Every candidate for certification shall—
 - (a) satisfy the Administration as to medical fitness, particularly regarding eyesight and hearing;
 - (b) meet the requirements for certification as an officer in charge of a navigational watch on ships of 200 gross register tons or more and have approved sea-going service in that capacity—
 - (i) for certification as chief mate, not less than 18 months; however, this period may be reduced to not less than 12 months if the Administration requires special training which it considers to be equivalent to at least six months service as officer in charge of a navigational watch;

- (ii) vir diplomering as gesagvoerder, minstens 36 maande; die tydperk kan egter verminder word tot minstens 24 maande indien minstens 12 maande van sodanige diens op see as hoofstuurman verrig is, of indien die Administrasie spesiale opleiding vereis wat hy as die ekwivalent van sodanige diens beskou;
- (c) tot tevredenheid van die Administrasie in die toepaslike eksamen geslaag het. Sodanige eksamen moet die materiaal uiteengesit in die Byvoegsel van hierdie Regulasie insluit, met die uitsondering dat die Administrasie hierdie eksamenvereistes kan aanpas vir gesagvoerders en hoofstuurmanne van skepe van beperkte grootte wat op kusvaarte gebruik word, na gelang hy dit nodig ag, met inagneming van die uitwerking op die veiligheid van alle skepe wat in dieselfde waters in gebruik mag wees.

Gesagvoerder en hoofstuurman van skepe van tussen 200 en 1 600 bruto registerton

3. Elke gesagvoerder en hoofstuurman van 'n seeskop van tussen 200 en 1 600 bruto registerton moet oor 'n toepaslike sertifikaat beskik.

4. Elke kandidaat vir diplomering moet—

- (a) die Administrasie oortuig van sy mediese geskiktheid, veral betreffende gesig en gehoor;
- (b) (i) vir diplomering as hoofstuurman, voldoen aan die vereistes vir 'n offisier in bevel van 'n navigasiewag op skepe van 200 bruto registerton of groter;
- (ii) vir diplomering as gesagvoerder, voldoen aan die vereistes vir 'n offisier in bevel van 'n navigasiewag op skepe van 200 bruto registerton of groter en goedgekeurde diens op see van minstens 36 maande in daardie hoedanigheid agter die rug hê; die tydperk kan egter verminder word tot minstens 24 maande indien minstens 12 maande van sodanige diens op see as hoofstuurman verrig is, of indien die Administrasie spesiale opleiding vereis wat hy as die ekwivalent van sodanige diens beskou;
- (c) tot die tevredenheid van die Administrasie in die toepaslike eksamen geslaag het. Sodanige eksamen moet die materiaal uiteengesit in die Byvoegsel insluit, met die uitsondering dat die Administrasie hierdie eksamenvereistes kan aanpas vir gesagvoerders en hoofstuurmanne van skepe wat vir kusvaarte gebruik word, namate hy dit toepaslik ag, ten einde materiaal uit te skakel wat nie van toepassing is op die betrokke waters of skepe nie, met inagneming van die uitwerking op die veiligheid van alle skepe wat in dieselfde waters in gebruik mag wees.

Algemeen

5. Die vereiste kennisvlak onder die verskillende hoofde van die Byvoegsel kan gewysig word afhangende daarvan of die sertifikaat uitgereik word op gesagvoerder- of hoofstuurmanvlak en afhangende daarvan of die sertifikaat of sertifikate van toepassing is op skepe van 1 600 bruto registerton of groter of op skepe van tussen 200 en 1 600 bruto registerton.

BYVOEGSEL VAN REGULASIE II/2

Minimum vereiste kennis vir diplomering van gesagvoerders en hoofstuurmanne van skepe van 200 bruto registerton of groter

1. Die leerplan hieronder is saamgestel vir die eksaminering van kandidate vir diplomering as gesagvoerder of hoofstuurman van skepe van 200 bruto registerton of groter. Dit is bedoel om die vakke in Regulasie II/4—“Verpligte

- (ii) for certification as master, not less than 36 months; however, this period may be reduced to not less than 24 months if not less than 12 months of such sea-going service has been served as chief mate, or if the Administration requires special training which it considers to be equivalent to such service;

- (c) have passed appropriate examination to the satisfaction of the Administration. Such examination shall include the material set out in the Appendix to this Regulation, except that the Administration may vary these examination requirements for masters and chief mates of ships of limited size engaged on near-coastal voyages, as it considers necessary, bearing in mind the effect on the safety of all ships which may be operating in the same waters.

Master and chief mate of ships of between 200 and 1 600 gross register tons

3. Every master and chief mate of a sea-going ship of between 200 and 1 600 gross register tons shall hold an appropriate certificate.

4. Every candidate for certification shall—

- (a) satisfy the Administration as to medical fitness, particularly regarding eyesight and hearing;
- (b) (i) for certification as chief mate, meet the requirements of an officer in charge of a navigational watch on ships of 200 gross register tons or more;
- (ii) for certification as master, meet the requirements of an officer in charge of a navigational watch on ships of 200 gross register tons or more and have approved sea-going service in that capacity of not less than 36 months; however, this period may be reduced to not less than 24 months if not less than 12 months of such sea-going service has been served as chief mate, or if the Administration requires special training which it considers to be equivalent to such service;
- (c) have passed appropriate examination to the satisfaction of the Administration. Such examination shall include the material set out in the Appendix, except that the Administration may vary these examination requirements for masters and chief mates of ships engaged on near-coastal voyages, as it considers appropriate, to exclude such material as is not applicable to the waters or ships concerned, bearing in mind the effect on the safety of all ships which may be operating in the same waters.

General

5. The level of knowledge required under the different headings of the Appendix may be varied according to whether the certificate is being issued at master or chief mate level, and according to whether the certificate or certificates is applicable to ships of 1 600 gross register tons or more, or to ships of between 200 and 1 600 gross register tons.

APPENDIX TO REGULASIE II/2

Minimum knowledge required for certification of masters and chief mates of ships of 200 gross register tons or more

1. The syllabus given below is compiled for examination of candidates for certification as master or chief mate of ships of 200 gross register tons or more. It is intended to

minimum vereistes vir diplomering van offisiere in bevel van 'n navigasiewag op skepe van 200 bruto registerton of groter"—in omvang en diepte uit te brei. Met in gedagte dat 'n gesagvoerder die uiteindelijke verantwoordelijkheid dra vir die veiligheid van die skip, sy passasiers, bemanning en vrag, en dat 'n hoofstuurman in staat moet wees om hierdie verantwoordelijkheid te eniger tyd oor te neem, moet die eksaminering in hierdie vakke daarop ingestel wees om sy vermoë te toets om alle beskikbare gegewens wat die veiligheid van die skip raak, te assimileer.

2. Navigasie en posisiebepaling.

(a) Vaartbeplanning en navigasie vir alle toestande:

- (i) Deur aanvaarbare metodes van uitstipping van oseaangrondkoerse;
- (ii) in nou waters;
- (iii) in ys;
- (iv) in beperkte sig;
- (v) in roetesemas vir skeepsverkeer;
- (vi) in gebiede met grootskaalse gety-uitwerkings.

(b) Posisiebepaling:

- (i) Deur astronomiese waarneming, insluitende die gebruik van die son, sterre, maan en planete;
- (ii) deur aardwaarnemings, insluitende die vermoë om peilings te gebruik van landtekens en navigasiehulpmiddels soos vuurtorings, bakens en boeie tesame met toepaslike kaarte, kennisgewings aan seelui en ander publikasies ten einde die akkuraatheid van die gevolglike posisiebepaling vas te stel;
- (iii) deur die gebruik van alle moderne elektroniese skeepsnavigasiehulpmiddels tot tevredenheid van die Administrasie, met besondere kennis van hulle werkingsbeginsels, beperkings, oorspronge van foute, die opspoor van wanvoorstellings van gegewens en korreksiemetodes om 'n akkurate posisiebepaling te verkry.

3. Waghou.

(a) Bewys lewer van 'n deeglike kennis van die inhoud, toepassing en oogmerke van die Internasionale Regulasies vir die Voorkoming van Botsings ter See, insluitende die Aanhangsels oor veilige navigasie.

(b) Bewys lewer van 'n kennis van Regulasie II/1—"Grondbeginsels waaraan gehou moet word by navigasiewaghouding".

4. Radartoerusting.

Demonstreer met behulp van 'n radarnabootser of, as daar nie een is nie, 'n maneuvreerbord, kennis van die grondbeginsels van radar en die vermoë met die bediening en gebruik van radar, en met die vertolking en ontleding van gegewens verkry uit hierdie toerusting, insluitende—

- (a) faktore wat werkverrigting en akkuraatheid affekteer;
- (b) instel en handhawing van vertonings;
- (c) bespeuring van wanvoorstelling van gegewens, valse eggo's, see-eggo's, ens.;
- (d) afstand en peiling;
- (e) uitkenning van kritieke eggo's;
- (f) koers en spoed van ander skepe;
- (g) tyd en afstand wanneer skepe die naaste aan mekaar sal kom by kruising, samekoms of inhaal;
- (h) bespeuring van koers- en spoedveranderings van ander skepe;
- (i) uitwerking van veranderings in eie skip se koers of spoed of beide;
- (j) toepassing van die Internasionale Regulasies vir die Voorkoming van Botsings ter See.

expand and extend in depth the subjects contained in Regulation II/4—"Mandatory Minimum Requirements for Certification of Officers in Charge of a Navigational Watch on Ships of 200 Gross Register Tons or More". Bearing in mind that a master has ultimate responsibility for the safety of the ship, its passengers, crew and cargo, and that a chief mate shall be in a position to assume that responsibility at any time, examination in these subjects shall be designed to test their ability to assimilate all available information that affects the safety of the ship.

2. Navigation and position determination.

(a) Voyage planning and navigation for all conditions:

- (i) By acceptable methods of plotting ocean tracks;
- (ii) within restricted waters;
- (iii) in ice;
- (iv) in restricted visibility;
- (v) in traffic separation schemes;
- (vi) in areas of extensive tidal effects.

(b) Position determination:

- (i) By celestial observations, including the use of sun, stars, moon and planets;
- (ii) by terrestrial observations, including the ability to use bearings from landmarks and aids to navigation such as lighthouses, beacons and buoys in conjunction with appropriate charts, notices to mariners and other publications to assess the accuracy of the resulting position fix;
- (iii) using all modern ship electronic navigational aids to the satisfaction of the Administration, with specific knowledge of their operating principles, limitations, sources of error, detection of misrepresentation of information and methods of correction to obtain accurate position fixing.

3. Watchkeeping.

(a) Demonstrate thorough knowledge of content, application and intent of the International Regulations for Preventing Collisions at Sea, including those Annexes concerned with safe navigation.

(b) Demonstrate knowledge of Regulation II/1—"Basic Principles to be Observed in Keeping a Navigational Watch".

4. Radar equipment.

Demonstrate in conjunction with the use of radar simulator or, when not available, manoeuvring board, knowledge of the fundamentals of radar and ability in the operation and use of radar, and in the interpretation and analysis of information obtained from this equipment, including—

- (a) factors affecting performance and accuracy;
- (b) setting up and maintaining displays;
- (c) detection of misrepresentation of information, false echoes, sea return, etc.;
- (d) range and bearing;
- (e) identification of critical echoes;
- (f) course and speed of other ships;
- (g) time and distance of closest approach of crossing, meeting or overtaking ships;
- (h) detecting course and speed changes of other ships;
- (i) effect of changes in own ship's course or speed or both;
- (j) application of the International Regulations for Preventing Collisions at Sea.

5. Die magnetiese en die tolkompas.

Vermoë om die foute van die magnetiese en die tolkompas te bepaal en reg te stel en kennis van die middele vir die regstel van sodanige foute.

6. Meteorologie en oseanografie.

(a) Bewys lewer van die vermoë om 'n sinoptiese kaart te verstaan en te vertolk en om gebiedsweë te voorspel, met inagneming van plaaslike weerstoestande.

(b) Kennis van die eienskappe van verskillende weerstelsels, insluitende tropiese werwelstorms en die ontwyking van stormsentrums en die gevaarlike kwadrante.

(c) Kennis van oseaanstroomstelsels.

(d) Vermoë om alle toepaslike navigasiepublikasies oor getye en strome te gebruik, met inbegrip van dié in Engels.

(e) Vermoë om getytoestande te bereken.

7. Skeepsmanoevrering en -hantering.

Manoevrering en hantering van 'n skip in alle toestande, met inbegrip van die volgende:

- (a) Maneuvers by die nadering van loodsvaartuie of -stasies, met behoorlike inagneming van weer, gety, la-veervordering en stopafstande;
- (b) hantering van 'n skip in riviere, riviermondings, ens., met inagneming van die uitwerking van stroming, wind en nou water op die reaksie op die roer;
- (c) manoevrering in vlak water, insluitende die afname in vry ruimte onder die kiel weens die uitwerking van vaarttrimming⁽¹⁾, rol en heibeweging;
- (d) interaksie tussen verbyvarende skepe en tussen eie skip en nabygeleë oewers (kanaal-effek);
- (e) vasmeer en vertrek in verskeie toestande van wind en gety met en sonder sleepbote;
- (f) keuse van ankerplek; ankering met een of twee ankers in beperkte ankerplekke en faktore betrokke by die vasstelling van die lengte ankerkabel wat nodig is;
- (g) ankersleep; klaring van onklaar ankers;
- (h) inbring in droogdok, sowel met as sonder skade;
- (i) beheer en hantering van skepe in stormweer, insluitende bystand aan 'n skip of lugvaartuig in nood, sleepoperasies, middele om 'n onbeheerbare skip uit 'n golfdal te hou, vermindering van afdryf en gebruik van olie;
- (j) voorsorg by die manoevrering vir die tewaterlating van bote of reddingsvlotte in gure weer;
- (k) metodes waarvolgens oorlewendes van reddingsbote of reddingsvlotte aan boord geneem kan word;
- (l) vermoë om die manoevrerings- en masjieneienskappe te bepaal van die vernaamste soorte skepe, met besondere aandag aan stopafstande en draaisirkels teen verskeie diepgange en snelhede;
- (m) die belangrikheid daarvan om teen verminderde spoed te vaar ten einde skade te voorkom veroorsaak deur eie skip se boeg- of hekgolf;
- (n) praktiese maatreëls wat getref moet word wanneer daar in ys of toestande van ysvorming aan boord gevaar word;
- (o) die gebruik van en manoevrering in roetskemas vir skeepsverkeer.

⁽¹⁾ Vaarttrimming: Die afname in die vry ruimte onder 'n skip wat voorkom wanneer die skip deur die water beweeg en veroorsaak word deur sowel romp-insinking as deur trimverandering. Die uitwerking word vererger in vlak water en neem af met 'n afname in die skip se spoed.

5. Compasses—magnetic and gyro.

Ability to determine and correct the errors of the magnetic and gyro-compasses and knowledge of the means for correcting such errors.

6. Meteorology and oceanography.

(a) Demonstrate the ability to understand and interpret a synoptic chart and to forecast area weather, taking into account local weather conditions.

(b) Knowledge of the characteristics of various weather systems, including tropical revolving storms and avoidance of storm centres and the dangerous quadrants.

(c) Knowledge of ocean current systems.

(d) Ability to use all appropriate navigational publications on tides and currents, including those in the English language.

(e) Ability to calculate tidal conditions.

7. Ship manoeuvring and handling.

Manoeuvring and handling of a ship in all conditions, including the following:

- (a) Manoeuvres when approaching pilot vessels or stations with due regard to weather, tide, headreach and stopping distances;
- (b) handling a ship in rivers, estuaries, etc., having regard to the effects of current, wind and restricted water on the response to the helm;
- (c) manoeuvring in shallow water, including the reduction in keel clearance due to the effect of squat⁽¹⁾, rolling and pitching;
- (d) interaction between passing ships and between own ship and nearby banks (canal effect);
- (e) berthing and unberthing under various conditions of wind and tide with and without tugs;
- (f) choice of anchorage; anchoring with one or two anchors in limited anchorages and factors involved in determining the length of anchor cable to be used;
- (g) dragging; clearing fouled anchors;
- (h) dry-docking, both with and without damage;
- (i) management and handling of ships in heavy weather, including assisting a ship or aircraft in distress, towing operations, means of keeping an unmanageable ship out of a sea trough, lessening drift and use of oil;
- (j) precautions in manoeuvring for launching boats or liferafts in bad weather;
- (k) methods of taking on board survivors from lifeboats or liferafts;
- (l) ability to determine the manoeuvring and engine characteristics of major types of ships with special reference to stopping distances and turning circles at various draught and speeds;
- (m) the importance of navigating at reduced speed to avoid damage caused by own ship's bow or stern wave;
- (n) practical measures to be taken when navigating in ice or conditions of ice accumulation on board;
- (o) the use of, and manoeuvring in, traffic separation schemes.

⁽¹⁾ Squat: The decrease in clearance beneath a ship which occurs when the ship moves through the water and is caused both by bodily sinkage and by change of trim. The effect is accentuated in shallow water and is reduced with a reduction in ship's speed.

8. Skeepstabiliteit⁽²⁾, konstruksie en skadebeperking.

(a) Begrip van die grondbeginsels van skeepkonstruksie en die teorieë en faktore wat trim en stabiliteit beïnvloed en maatreëls wat nodig is om veilige trim en stabiliteit te behou.

(b) Kennis van die uitwerking op trim en stabiliteit van 'n skip in die geval van skade aan en gevolglike oorstroming van 'n afdeling en teenmaatreëls wat getref moet word.

(c) Die gebruik aantoon van stabiliteits-, trim- en spanningstafels, -diagramme en spanningberekeningstoerusting, insluitende kennis van vraginskeping en die inneem van ballas ten einde rompspanning binne aanneemlike perke te hou.

(d) Algemene kennis van die vernaamste raamdele van 'n skip en die korrekte name van die onderskeie dele.

(e) Kennis van die IMCO-aanbevelings betreffende skeepstabiliteit.

9. Skeepskraginstallasies.

(a) Bedryfsbeginsels van marine-kraginstallasies.

(b) Skeepshulpmasjinerie.

(c) Algemene kennis van marine-ingenieursterme.

10. Vraghantering en -stuwung.

(a) Die stuwung en bevestiging van vragte aan boord van skepe, met inbegrip van laaioerusting.

(b) Inskepings- en ontskepingsoperasies, met besondere aandag aan die inskeping en ontskeping van swaargoedere-hysings.

(c) Internasionale regulasies en aanbevelings betreffende die vervoer van vrag, in die besonder die International Maritime Dangerous Goods Code (IMDG).

(d) Vervoer van gevaarlike goedere; voorsorg wat getref moet word gedurende die inskepings- en ontskepingsoperasies en die versorging van gevaarlike goedere gedurende 'n vaart.

(e) 'n Praktiese kennis van die inhoud en toepassing van huidige toepaslike tenkskipveiligheidshandleidings.

(f) 'n Praktiese kennis van die algemeen gebruikte pyp-en pompinrigtings vir vrag.

(g) Terme en definisies gebruik om die eienskappe van algemene olievrag te beskryf, soos ru-olie, middeldistillate, nafta.

(h) Besoedelingsregulasies; inneem van ballas, prosedures om tenks skoon te maak en van gas te bevry.

(i) Boladingsprosedures.

11. Brandvoorkoming en brandbestrydingstoestelle.

(a) Organiserung van brandweeroefeninge.

(b) Soorte brande en brandchemie.

(c) Brandbestrydingstelsels.

(d) Bywoning van 'n goedgekeurde brandweerkursus.

(e) Kennis van regulasies betreffende brandweertoerusting.

12. Noodprosedures.

(a) Voorsorg wanneer 'n skip op die strand gestuur word.

(b) Stappe wat gedoen moet word voor en na stranding.

(c) Vlotmaak van 'n skip wat op die grond vasgeloop het, met en sonder bystand.

(d) Stappe wat gedoen moet word na 'n botsing.

⁽²⁾ Gesagvoerders en hoofstuurmanne in diens op klein skepe moet ten volle vertrouwd wees met die basiese stabiliteitsvereistes van sodanige skepe.

8. Ship stability⁽²⁾, construction and damage control.

(a) Understanding fundamental principles of ship construction and the theories and factors affecting trim and stability and measures necessary to preserve safe trim and stability.

(b) Knowledge of the effect on trim and stability of a ship in the event of damage to and consequent flooding of a compartment and counter measures to be taken.

(c) Demonstrate use of stability, trim and stress tables, diagrams and stress calculating equipment, including knowledge of loading cargoes and ballasting in order to keep hull stresses within acceptable limits.

(d) General knowledge of the principal structural members of a ship and the proper names of the various parts.

(e) Knowledge of IMCO recommendations concerning ship stability.

9. Ship power plants.

(a) Operating principles of marine power plants.

(b) Ships' auxiliary machinery.

(c) General knowledge of marine engineering terms.

10. Cargo handling and stowage.

(a) The stowage and securing of cargoes on board ships, including cargo gear.

(b) Loading and discharging operations, with special regard to loading and discharging of heavy weights.

(c) International regulations and recommendations relating to the carriage of cargoes, in particular the International Maritime Dangerous Goods Code (IMDG).

(d) Carriage of dangerous goods; precautions to be taken during loading and discharging operations and the care of dangerous goods during a voyage.

(e) Working knowledge of contents and application of current relevant tanker safety guides.

(f) Working knowledge of commonly used cargo piping and pumping arrangements.

(g) Terms and definitions used to describe properties of common oil cargoes, such as crude oil, middle distillates, naphtha.

(h) Pollution regulations; ballasting, tank cleaning and gas freeing operations.

(i) Load-on-top procedures.

11. Fire prevention and fire-fighting appliances.

(a) Organization of fire drills.

(b) Classes and chemistry of fire.

(c) Fire-fighting systems.

(d) Attendance at an approved fire-fighting course.

(e) Knowledge of regulations concerning fire-fighting equipment.

12. Emergency procedures.

(a) Precautions when beaching a ship.

(b) Action to be taken prior to, and after, grounding.

(c) Floating a grounded ship, with and without assistance.

(d) Action to be taken following a collision.

⁽²⁾ Masters and chief mates serving on small ships shall be fully acquainted with the basic stability requirements of such ships.

(e) Tydelike herstel van lekplekke.

(f) Maatreëls vir die beskerming en beveiliging van passasiers en bemanning in noodgevalle.

(g) Bepערking van skade en redding van die skip na 'n brand of ontploffing.

(h) Verlating van 'n skip.

(i) Noodstuur, optakeling en gebruik van noodstuur en die middele om 'n noodroer op te takel, waar doenlik.

(j) Redding van persone van 'n skip in nood of van 'n wrak af.

(k) Man-oorboord-prosedures.

13. Mediese sorg.

'n Deeglike kennis van die gebruik van die inhoud van die volgende publikasies:

(a) International Medical Guide for Ships of ekwivalente nasionale publikasies;

(b) die mediese gedeelte van die International Code of Signals;

(c) Medical First Aid Guide For Use in Accidents Involving Dangerous Goods.

14. Maritieme reg.

(a) 'n Kennis van die internasionale maritieme reg soos beliggaam in internasionale ooreenkomste en konvensies in die mate waarin hulle betrekking het op die uitdruklike verpligtinge en verantwoordelikhede van die gesagvoerder, in die besonder dié rakende veiligheid en die beskerming van die mariene omgewing. Daar moet veral aan die volgende sake aandag geskenk word:

(i) Sertifikate en ander dokumente wat ingevolge internasionale konvensies aan boord van skepe gehou moet word, hoe hulle verkry kan word en die tydperk van hulle regsgeldigheid;

(ii) verantwoordelikhede ingevolge die toepaslike vereistes van die Internasionale Laslynkonvensie;

(iii) verantwoordelikhede ingevolge die toepaslike vereistes van die Internasionale Konvensie vir die Beveiliging van Menseleuens ter See;

(iv) verantwoordelikhede ingevolge internasionale konvensies vir die voorkoming van besoedeling deur skepe;

(v) maritieme gesondheidsverklarings; die vereistes van die International Health Regulations;

(vi) verantwoordelikhede ingevolge die Konvensie insake die Internasionale Regulasies vir die Voorkoming van Botsings ter See;

(vii) verantwoordelikhede ingevolge ander internasionale dokumente rakende die veiligheid van die skip, passasiers, bemanning en vrag.

(b) Die omvang van die kennis van nasionale maritieme wetgewing word aan die oordeel van die Administrasie oorgelaat, maar moet nasionale reëlings insluit vir die toepassing van internasionale ooreenkomste en konvensies.

15. Verantwoordelikhede in verband met personeelbestuur en -opleiding.

'n Kennis van personeelbestuur, -organisasie en -opleiding aan boord van skepe.

16. Kommunikasie.

(a) Die vermoë om berigte met morselig te versend en te ontvang en om die International Code of Signals te gebruik; waar die Administrasie kandidate op die laer diplomeringvlak in hierdie vakke geëksamineer het, het hy die keuse om nie in dié vakke te hereksamineer vir diplomering as gesagvoerder nie.

(e) Temporary plugging of leaks.

(f) Measures for the protection and safety of passengers and crew in emergencies.

(g) Limiting damage and salvaging the ship following a fire or explosion.

(h) Abandoning ship.

(i) Emergency steering, rigging and use of jury steering and the means of rigging a jury rudder, where practicable.

(j) Rescuing persons from a ship in distress or from a wreck.

(k) Man-overboard procedures.

13 Medical care.

A thorough knowledge of the use of the contents of the following publications:

(a) International Medical Guide for Ships or equivalent national publications;

(b) medical section of the International Code of Signals;

(c) Medical First Aid Guide For Use in Accidents Involving Dangerous Goods.

14. Maritime law.

(a) A knowledge of international maritime law as embodied in international agreements and conventions as they affect the specific obligations and responsibilities of the master, particularly those concerning safety and the protection of the marine environment. Regard shall be paid especially to the following subjects:

(i) Certificates and other documents required to be carried on board ships by international conventions, how they may be obtained and the period of their legal validity;

(ii) responsibilities under the relevant requirements of the International Convention on Load Lines;

(iii) responsibilities under the relevant requirements of the International Convention for the Safety of Life at Sea;

(iv) responsibilities under international conventions for the prevention of pollution from ships;

(v) maritime declarations of health; the requirements of the International Health Regulations;

(vi) responsibilities under the Convention on the International Regulations for Preventing Collisions at Sea;

(vii) responsibilities under other international instruments affecting the safety of the ship, passengers, crew and cargo.

(b) The extent of knowledge of national maritime legislation is left to the discretion of the Administration but shall include national arrangements for implementing international agreements and conventions.

15. Personnel management and training responsibilities.

A knowledge of personnel management, organization and training aboard ships.

16. Communications.

(a) Ability to transmit and receive messages by morse light and to use the International Code of Signals; where the Administration has examined candidates in these subjects at the lower levels of certification, they may have the option of not re-examining in these subjects for certification as master.

(b) Kennis van die gebruiklike prosedures by radiotelefoonkommunikasie en die vermoë om radiotelefone te gebruik, in die besonder ten opsigte van nood-, spoed-, veiligheids- en navigasieberigte.

(c) Kennis van die prosedures vir dringende noodseine per radiotelegrafie soos voorgeskryf in die Radioregulasies.

17. Lewensredding.

Deeglike kennis van reddingstoestelregulasies (Internasionale Konvensie vir die Beveiliging van Menselewens op See), organisering van skipverlatingsoefeninge, reddingsbote, reddingsvlotte en ander reddingstoestelle.

18. Soek-en-redding.

Deeglike kennis van die IMCO Merchant Ship Search and Rescue Manual (MERSAR).

19. Metodes om bewys te lewer van bedrewenheid.

(a) Navigasie:

Demonstreer die gebruik van die sekstant, pelorus, asimutspieël en die vermoë om posisie, koers en peilings uit te stip.

(b) Internasionale Regulasies vir die Voorkoming van Botsings ter See:

(i) Die gebruik van klein modelle wat behoorlike seine of ligte vertoon, of navigasielignabootser;

(ii) manoeuvrerbord of radarnabootser.

(c) Radar:

(i) Radarnabootser; of

(ii) manoeuvrerborde.

(d) Brandbestryding:

Bywoning van 'n goedgekeurde brandweerkursus.

(e) Kommunikasie:

Visuele en mondelinge praktiese toets.

(f) Lewensredding:

Tewaterlating en hantering van reddingsbote en ander reddingstoestelle, insluitende die aantrek van reddingsbaadjies.

Regulasie II/3

Verpligte minimum vereistes vir die diplomering van offisiere in bevel van 'n navigasiewag en van gesagvoerders van skepe kleiner as 200 bruto registerton

1. Skepe wat nie vir kusvaarte gebruik word nie.

(a) Elke gesagvoerder in diens op 'n seeskop van kleiner as 200 bruto registerton wat nie op kusvaarte gebruik word nie, moet beskik oor 'n sertifikaat erken deur die Administrasie vir diens as gesagvoerder van skepe van tussen 200 en 1 600 bruto registerton.

(b) Elke offisier in bevel van 'n navigasiewag in diens op 'n seeskop van kleiner as 200 bruto registerton wat nie op kusvaarte gebruik word nie, moet beskik oor 'n toepaslike sertifikaat vir skepe van 200 bruto registerton of groter.

2. Skepe wat op kusvaarte gebruik word.

(a) Gesagvoerder:

(i) Elke gesagvoerder in diens op 'n seeskop van kleiner as 200 bruto registerton wat op kusvaarte gebruik word, moet oor 'n toepaslike sertifikaat beskik.

(ii) Elke kandidaat vir diplomering moet—

(1) minstens 20 jaar oud wees;

(2) goedgekeurde diens op see agter die rug hê van minstens 12 maande as offisier in bevel van 'n navigasiewag;

(3) die Administrasie daarvan oortuig dat hy oor genoegsame kennis beskik ooreenkomstig sy pligte op die betrokke skepe, wat die vakke in die Byvoegsel van hierdie Regulasie moet insluit.

(b) Knowledge of procedures used in radiotelephone communications and ability to use radiotelephones, in particular with respect to distress, urgency, safety and navigational messages.

(c) A knowledge of the procedures for emergency distress signals by radiotelegraphy as prescribed in the Radio Regulations.

17. Life-saving.

A thorough knowledge of life-saving appliance regulations (International Convention for the Safety of Life at Sea), organization of abandon ship drills, lifeboats, liferafts and other life-saving equipment.

18. Search and rescue.

A thorough knowledge of the IMCO Merchant Ship Search and Rescue Manual (MERSAR).

19. Methods for demonstration of proficiency.

(a) Navigation:

Demonstrate the use of sextant, pelorus, azimuth mirror and ability to plot position, course, bearings.

(b) International Regulations for Preventing Collisions at Sea:

(i) use of small models displaying proper signals or lights, or navigation light simulator;

(ii) manoeuvring board or radar simulator.

(c) Radar:

(i) Radar simulator; or

(ii) manoeuvring boards.

(d) Fire fighting:

Attendance at an approved fire-fighting course.

(e) Communications:

Visual and vocal practical test.

(f) Life-saving:

Launching and handling of lifeboats and other life-saving appliances, including the donning of life-jackets.

Regulation II/3

Mandatory minimum requirements for certification of officers in charge of a navigational watch and of masters of ships of less than 200 gross register tons

1. Ships not engaged on near-coastal voyages.

(a) Every master serving on a sea-going ship of less than 200 gross register tons not engaged on near-coastal voyages shall hold a certificate recognized by the Administration for service as master of ships of between 200 and 1 600 gross register tons.

(b) Every officer in charge of a navigational watch serving on a sea-going ship of less than 200 gross register tons not engaged on near-coastal voyages shall hold an appropriate certificate for ships of 200 gross register tons or more.

2. Ships engaged on near-coastal voyages.

(a) Master:

(i) Every master serving in a sea-going ship of less than 200 gross register tons engaged on near-coastal voyages shall hold an appropriate certificate.

(ii) Every candidate for certification shall—

(1) be not less than 20 years of age;

(2) have approved sea-going service of not less than 12 months as officer in charge of a navigational watch;

(3) satisfy the Administration that he possesses adequate knowledge appropriate to his duties on the ships concerned which shall include the subjects contained in the Appendix to this Regulation.

(b) Offisier in bevel van 'n navigasiewag:

- (i) Elke offisier in bevel van 'n navigasiewag op 'n seeskip van kleiner as 200 bruto registerton wat op kusvaarte gebruik word, moet oor 'n toepaslike sertifikaat beskik.
- (ii) Elke kandidaat vir diplomering moet—
 - (1) minstens 18 jaar oud wees;
 - (2) die Administrasie oortuig van sy mediese geskiktheid, in die besonder betreffende gesig en gehoor;
 - (3) die Administrasie oortuig dat hy
 - spesiale opleiding met welslae deurloop het, met inbegrip van 'n toereikende tydperk van toepaslike diens op see wat die Administrasie vereis; of
 - goedgekeurde diens op see van minstens drie jaar in die dekadefdeling verrig het;
 - (4) die Administrasie daarvan oortuig dat hy oor toereikende kennis beskik ooreenkomstig sy pligte op die betrokke skeep, wat die vakke in die Byvoegsel moet insluit.

3. Opleiding.

Opleiding om die nodige kennis te bekom en praktiese ervaring op te doen, moet gebaseer wees op Regulasie II/1—“Grondbeginsels waaraan gehou moet word by navigasiewaghouding” en die betrokke internasionale regulasies en aanbevelings.

4. Vrystellings.

Die Administrasie kan, as hy meen dat 'n skip se grootte en die toestande van sy vaart sodanig is dat dit die toepassing van die volle vereistes van hierdie Regulasie en sy Byvoegsel onredelik of ondoenlik maak, in daardie mate die gesagvoerder en die offisier in bevel van 'n navigasiewag op so 'n skip of klas skeep van sommige van die vereistes vrystel, met inagneming van die veiligheid van alle skeep wat in dieselfde waters mag vaar.

BYVOEGSEL VAN REGULASIE II/3

Minimum kennis vereis vir diplomering van offisiere in bevel van 'n navigasiewag en van gesagvoerders van skeep kleiner as 200 bruto registerton

- 1. (a) Kennis van die volgende:
 - (i) Kusnavigasie en, in die vereiste mate, astronavigasie;
 - (ii) die Internasionale Regulasies vir die Voorkoming van Botsings ter See;
 - (iii) International Maritime Dangerous Goods Code (IMDG);
 - (iv) magnetiese kompas;
 - (v) radiotelefonie en visuele seinwerk;
 - (vi) brandvoorkoming en brandweertoestelle;
 - (vii) lewensredding;
 - (viii) noodprosedures;
 - (ix) skeepsmaneuvrering;
 - (x) skeepstabiliteit;
 - (xi) meteorologie;
 - (xii) kraginstallasies vir klein skeep;
 - (xiii) noodhulp;
 - (xiv) soek-en-redding;
 - (xv) voorkoming van besoedeling van die mariene omgewing.

(b) Benewens die vereistes van subparagraaf (a), genoegsame kennis om alle navigasiehulpmiddels en -toerusting aan boord van die betrokke skeep veilig te hanteer.

(b) Officer in charge of a navigational watch:

- (i) Every officer in charge of a navigational watch on a sea-going ship of less than 200 gross register tons engaged on near-coastal voyages shall hold an appropriate certificate.
- (ii) Every candidate for certification shall—
 - (1) be not less than 18 years of age;
 - (2) satisfy the Administration as to medical fitness, particularly regarding eyesight and hearing;
 - (3) satisfy the Administration that he has
 - successfully undergone special training, including an adequate period of appropriate sea-going service as required by the Administration; or
 - completed approved sea-going service in the deck department of not less than three years;
 - (4) satisfy the Administration that he possesses adequate knowledge appropriate to his duties on the ships concerned, which shall include the subjects contained in the Appendix.

3. Training.

Training to achieve the necessary knowledge and practical experience shall be based on Regulation II/1—“Basic Principles to be Observed in Keeping a Navigational Watch” and relevant international regulations and recommendations.

4. Exemptions.

The Administration, if it considers that a ship's size and the conditions of its voyage are such as to render the application of the full requirements of this Regulation and its Appendix unreasonably or impracticable, may to that extent exempt the master and the officer in charge of a navigational watch on such a ship or class of ships from some of the requirements, bearing in mind the safety of all ships which may be operating in the same waters.

APPENDIX TO REGULATION II/3

Minimum knowledge required for certification of officers in charge of a navigational watch and of masters of ships of less than 200 gross register tons

- 1. (a) Knowledge of the following:
 - (i) Coastal navigation and, to the extent required, celestial navigation;
 - (ii) International Regulations for Preventing Collisions at Sea;
 - (iii) International Maritime Dangerous Goods Code (IMDG);
 - (iv) magnetic compass;
 - (v) radiotelephony and visual signalling;
 - (vi) fire prevention and fire-fighting appliances;
 - (vii) life-saving;
 - (viii) emergency procedures;
 - (ix) ship manoeuvring;
 - (x) ship stability;
 - (xi) meteorology;
 - (xii) small ship power plants;
 - (xiii) first aid;
 - (xiv) search and rescue;
 - (xv) prevention of pollution of the marine environment.

(b) In addition to the requirements of subparagraph (a), sufficient knowledge to operate safely all navigational aids and equipment fitted aboard the ships concerned.

(c) Die vereiste kennisvlak in die vakke genoem in subparagrafe (a) en (b) moet toereikend vir die offisier van die wag wees om sy pligte veilig uit te voer.

2. Elke gesagvoerder in diens op 'n seeskop kleiner as 200 bruto registerton moet, benewens die vereistes van paragraaf 1 hierbo, die Administrasie daarvan oortuig dat hy oor die kennis beskik om al die pligte van so 'n gesagvoerder veilig uit te voer.

Regulasie II/4

Verpligte minimum vereistes vir diplomering van offisiere in bevel van 'n navigasiewag op skepe van 200 bruto registerton of groter

1. Elke offisier in bevel van 'n navigasiewag in diens op 'n seeskop van 200 bruto registerton of groter moet oor 'n toepaslike sertifikaat beskik.

2. Elke kandidaat vir diplomering moet—

- (a) minstens 18 jaar oud wees;
- (b) die Administrasie oortuig van sy mediese geskiktheid, in die besonder betreffende gesig en gehoor;
- (c) oor goedgekeurde diens op see agter die rug hê van minstens drie jaar in die dekadefdeling, wat minstens ses maande se brugwagpligte onder toesig van 'n gekwalifiseerde offisier insluit; 'n Administrasie kan egter die vervanging deur 'n tydperk van spesiale opleiding toelaat vir hoogstens twee jaar van hierdie goedgekeurde diens op see, met dien verstande dat die Administrasie oortuig is dat sodanige opleiding ten minste gelykwaardig is met die tydperk van diens op see wat dit vervang;
- (d) deur in 'n toepaslike eksamen te slaag die Administrasie oortuig dat hy oor toereikende teoretiese en praktiese kennis beskik ooreenkomstig sy pligte.

3. *Sertifikate vir diens sonder beperking.*

Vir die uitreik van sertifikate vir diens sonder beperking wat die vaargebied betref, moet die eksamen die toereikendheid toets van die kandidaat se teoretiese en praktiese kennis in die vakke getoon in die Byvoegsel van hierdie Regulasie.

4. *Beperkte sertifikate.*

Vir die uitreiking van beperkte sertifikate vir diens op kusvaarte, kan die Administrasie die volgende vakke uitlaan uit dié wat in die Byvoegsel getoon word, met inagneming van die uitwerking op die veiligheid van alle skepe wat in dieselfde waters mag vaar:

- (a) Astronavigasie;
- (b) elektroniese stelsels vir posisiebepaling en navigasie vir waters nie deur sodanige stelsels gedek nie.

5. *Kennisvlak.*

(a) Die vereiste kennisvlak in die vakke getoon in die Byvoegsel, moet voldoende vir die offisier van die wag wees om sy wagdienspligte veilig na te kom. By die bepaling van die geskikte kennisvlak moet die Administrasie die opmerkings onder elke vak in die Byvoegsel in aanmerking neem.

(b) Opleiding om die nodige teoretiese kennis te bekom en praktiese ervaring op te doen, moet gebaseer word op Regulasie II/1—"Grondbeginsels waaraan gehou moet word by navigasiewaghouding" en op toepaslike internasionale regulasies en aanbevelings.

BYVOEGSEL VAN REGULASIE II/4

Minimum vereiste kennis vir diplomering van offisiere in bevel van 'n navigasiewag op skepe van 200 bruto registerton of groter

1. *Astronavigasie.*

Vermoë om hemelliggame te gebruik om die skip se posisie en kompasfout vas te stel.

(c) The level of knowledge to be required in the subjects specified in subparagraphs (a) and (b) shall be sufficient for the officer of the watch to carry out his duties safely.

2. Every master serving on a sea-going ship of less than 200 gross register tons shall, in addition to the requirements of paragraph 1 above, satisfy the Administration that he possesses the knowledge to carry out all the duties of such a master safely.

Regulation II/4

Mandatory minimum requirements for certification of officers in charge of a navigational watch on ships of 200 gross register tons or more

1. Every officer in charge of a navigational watch serving on a sea-going ship of 200 gross register tons or more shall hold an appropriate certificate.

2. Every candidate for certification shall—

- (a) be not less than 18 years of age;
- (b) satisfy the Administration as to medical fitness, particularly regarding eyesight and hearing;
- (c) have approved sea-going service in the deck department of not less than three years which shall include at least six months of bridge watchkeeping duties under the supervision of a qualified officer; however, an Administration may allow the substitution of a period of special training for not more than two years of this approved sea-going service, provided the Administration is satisfied that such training is at least equivalent in value to the period of sea-going service it replaces;
- (d) satisfy the Administration by passing an appropriate examination that he possesses adequate theoretical and practical knowledge appropriate to his duties.

3. *Certificates for service without restriction.*

For issue of certificates for service without restriction as to area of operation, the examination shall test the adequacy of the candidate's theoretical and practical knowledge in the subjects shown in the Appendix to this Regulation.

4. *Restricted certificates.*

For issue of restricted certificates for service on near-coastal voyages, the Administration may omit the following subjects from those shown in the Appendix, bearing in mind the effect on the safety of all ships which may be operating in the same waters:

- (a) celestial navigation;
- (b) electronic systems of position fixing and navigation for waters not covered by such systems.

5. *Level of knowledge.*

(a) The level of knowledge to be required in the subjects shown in the Appendix shall be sufficient for the officer of the watch to carry out his watchkeeping duties safely. In determining the appropriate level of knowledge the Administration shall take into account the remarks under each subject in the Appendix.

(b) Training to achieve the necessary theoretical knowledge and practical experience shall be based on Regulation II/1—"Basic Principles to be Observed in Keeping a Navigational Watch" and relevant international regulations and recommendations.

APPENDIX TO REGULATION II/4

Minimum knowledge required for certification of officers in charge of a navigational watch on ships of 200 gross register tons or more

1. *Celestial navigation.*

Ability to use celestial bodies to determine the ship's position and compass errors.

2. Aard- en kusnavigasie.

(a) Vermoë om die skip se posisie te bepaal deur die gebruik van—

- (i) landtekens;
- (ii) navigasihulpmiddels, met inbegrip van vuurtorings, bakens en boeie;
- (iii) gisbestek, met inagneming van winde, getye, strome en spoed volgens skroefomwentelinge per minuut en per log.

(b) Deeglike kennis van navigasiekaarte en -publikasies, soos vaaraanwysings, getyafels, kennisgewings aan seevaarders, radio-navigasiewaarskuwings en skeepsroetegewens, en die vermoë om dit te gebruik.

3. Radarnavigasie.

Kennis van die grondbeginsels van radar en bekwaamheid in die werking en aanwending van radar en vermoë om die gegewens te vertolk en te ontleed wat verkry word deur die aanwending van radar, met inbegrip van die volgende:

- (a) Faktore wat werkverrigting en akkuraatheid beïnvloed;
- (b) instel en handhaaf van vertonings;
- (c) bespeuring van wanvoorstellings van gegewens, vals eggo's, see-eggo's, ens.;
- (d) afstand en peiling;
- (e) uitkenning van kritieke eggo's;
- (f) koers en spoed van ander skepe;
- (g) tyd en afstand wanneer skepe die naaste aan mekaar sal kom by kruising, samekoms of inhaal;
- (h) bespeuring van koers- en spoedveranderings van ander skepe;
- (i) uitwerking van veranderings in eie skip se koers of spoed of beide;
- (j) toepassing van die Internasionale Regulasies vir die Voorkoming van Botsings ter See.

4. Waghou.

(a) Bewys lewer van 'n deeglike kennis van die inhoud, toepassing en oogmerke van die Internasionale Regulasies vir die Voorkoming van Botsings ter See, met inbegrip van die Aanhangsels oor veilige navigasie.

(b) Bewys lewer van 'n kennis van Regulasie II/1—"Grondbeginsels waaraan gehou moet word by navigasiewaghouding".

5. Elektroniese stelsels vir posisiebepaling en navigasie.

Vermoë om die skip se posisie tot tevredenheid van die Administrasie vas te stel deur die gebruik van elektroniese navigasihulpmiddels.

6. Radiorigtingpeilers en -eggopeilers.

Vermoë om die apparaat te bedien en die gegewens korrek toe te pas.

7. Meteorologie.

Kennis van meteorologiese instrumente aan boord van skepe en hulle toepassing. Kennis van die eienskappe van verskillende weerstelsels, aanmeldingsprosedures en registreerstelsels en die vermoë om die beskikbare meteorologiese gegewens aan te wend.

8. Die magnetiese en die tolkompas.

Kennis van die beginsels van die magnetiese en die tolkompas, met inbegrip van foute en regstellings. Wat tolkompasse betref, 'n begrip van die stelsels onder beheer van die hooftolkompas en 'n kennis van die werking en versorging van die vernaamste soorte tolkompasse.

9. Outomatiese loods.

Kennis van outomatiese loodsstelsels en -prosedures.

2. Terrestrial and coastal navigation.

(a) Ability to determine the ship's position by the use of—

- (i) landmarks;
- (ii) aids to navigation, including lighthouses, beacons and buoys;
- (iii) dead reckoning, taking into account winds, tides, currents and speed by propeller revolutions per minute and by log.

(b) Thorough knowledge of and ability to use navigational charts and publications, such as sailing directions, tide tables, notices to mariners, radio navigational warnings and ships' routing information.

3. Radar navigation.

Knowledge of the fundamentals of radar and ability in the operation and use of radar and ability to interpret and analyse information obtained by use of radar including the following:

- (a) Factors affecting performance and accuracy;
- (b) setting up and maintaining displays;
- (c) detection of misrepresentation of information, false echoes, sea return, etc.;
- (d) range and bearing;
- (e) identification of critical echoes;
- (f) course and speed of other ships;
- (g) time and distance of closest approach of crossing, meeting or overtaking ships;
- (h) detecting course and speed changes of other ships;
- (i) effect of changes in own ship's course or speed or both;
- (j) application of the International Regulations for Preventing Collisions at Sea.

4. Watchkeeping.

(a) Demonstrate thorough knowledge of content, application and intent of the International Regulations for Preventing Collisions at Sea, including those Annexes concerned with safe navigation.

(b) Demonstrate knowledge of content of Regulation II/1—"Basic Principles to be Observed in Keeping a Navigational Watch".

5. Electronic systems of position fixing and navigation.

Ability to determine the ship's position by the use of electronic navigational aids to the satisfaction of the Administration.

6. Radio direction-finders and echo-sounders.

Ability to operate the equipment and apply the information correctly.

7. Meteorology.

Knowledge of shipborne meteorological instruments and their application. Knowledge of the characteristics of various weather systems, reporting procedures and recording systems and the ability to apply the meteorological information available.

8. Compasses—magnetic and gyro.

Knowledge of the principles of magnetic and gyro-compasses including errors and corrections. With regard to gyro-compasses, an understanding of the systems under the control of the master gyro and a knowledge of the operation and care of the main types of gyro-compasses.

9. Automatic pilot.

Knowledge of automatic pilot systems and procedures.

10. Radiotelefonie en visuele seinwerk.

(a) Vermoë om berigte by wyse van morselig te versend en te ontvang.

(b) Vermoë om die International Code of Signals te gebruik.

(c) Kennis van gebruiklike prosedures by radiotelefoniekommunikasie en die vermoë om radiotelefone te gebruik, in die besonder ten opsigte van nood-, spoed-, veiligheids- en navigasieberigte.

11. Brandvoorkoming en brandweertoestelle.

(a) Vermoë om brandweeroefeninge te organiseer.

(b) Kennis van die soorte brande en brandchemie.

(c) Kennis van brandbestrydingstelsels.

(d) Bywoning van 'n goedgekeurde brandweerkursus.

12. Lewensredding.

Vermoë om skeepsontuimingsoefeninge te organiseer en kennis van die werking van reddingsbote, reddingsvlotte, dryftoestelle en soortgelyke reddingstoestelle tesame met hulle toerusting, met inbegrip van draagbare radio-apparaat en nood-posisieaanduidingradiobakens (EPIRBs). Kennis van oorlewingsstegnieke ter see.

13. Noodprosedures.

Kennis van die gelyste items in die toepaslike Byvoegsel van die huidige uitgawe van die IAO/IMCO "Document for Guidance".

14. Skeepsmanewrering en -hantering.

Kennis van—

(a) die uitwerking van verskeie ladingsgewigte, diepgange, trim, spoed en vry ruimte onder die kiel op draaisirkels en stopafstande;

(b) uitwerking van wind en stroming op skeepshantering;

(c) manewers vir die redding van man-oorboord;

(d) vaartrimming, vlak water en soortgelyke effekte;

(e) behoorlike prosedures vir ankergooi en vasmeer.

15. Skeepstabiliteit.

(a) Praktiese kennis en toepassing van stabiliteits-, trim- en spanningstafels, -diagramme en spanningsberekennings-toerusting.

(b) Begrip van die basiese stappe wat gedoen moet word in die geval van gedeeltelike verlies van intakte dryfvermoë.

16. Engelse taal.

Genoegsame kennis van Engels om die offisier in staat te stel om kaarte en ander seevaartpublikasies te gebruik, om meteorologiese gegewens en berigte rakende die skip se veiligheid en werking te verstaan en om sy kommunikasie met ander skepe en kusstasies duidelik te verwoord. Vermoë om die IMCO Standard Marine Navigational Vocabulary te verstaan en te gebruik.

17. Skeepsbou.

Algemene kennis van die vernaamste raamdele van 'n skip en die korrekte name van die onderskeie dele.

18. Vraghantering en -stuwing.

Kennis van die veilige hantering en stuwing van vrage en die uitwerking van hierdie faktore op die veiligheid van die skip.

19. Mediese hulp.

Praktiese toepassing van mediese handleidings en advies per radio, met inbegrip van die vermoë om doeltreffende stappe te doen gebaseer op sodanige kennis in die geval van ongelukke of siektes wat waarskynlik aan boord van 'n skip kan voorkom.

10. Radiotelephony and visual signalling.

(a) Ability to transmit and receive messages by morse light.

(b) Ability to use the International Code of Signals.

(c) Knowledge of procedures used in radiotelephone communications and ability to use radiotelephones, in particular with respect to distress, urgency, safety and navigational messages.

11. Fire prevention and fire-fighting appliances.

(a) Ability to organize fire drills.

(b) Knowledge of classes and chemistry of fire.

(c) Knowledge of fire-fighting systems.

(d) Attendance at an approved fire-fighting course.

12. Life-saving.

Ability to organize abandon ship drills and knowledge of the operation of lifeboats, liferafts, buoyant apparatus and similar life-saving appliances along with their equipment, including portable radio apparatus and emergency position-indicating radio beacons (EPIRBs). Knowledge of survival at sea techniques.

13. Emergency procedures.

Knowledge of the items listed in the appropriate Appendix of the current edition of the ILO/IMCO "Document for Guidance".

14. Ship manoeuvring and handling.

Knowledge of—

(a) the effects of various deadweights, draughts, trim, speed and under keel clearance on turning circles and stopping distances;

(b) effects of wind and current on ship handling;

(c) manoeuvres for the rescue of man-overboard;

(d) squat, shallow water and similar effects;

(e) proper procedures for anchoring and mooring.

15. Ship stability.

(a) Working knowledge and application of stability, trim and stress tables, diagrams and stress calculating equipment.

(b) Understanding of fundamental actions to be taken in the event of partial loss of intact buoyancy.

16. English language.

Adequate knowledge of the English language enabling the officer to use charts and other nautical publications, to understand meteorological information and messages concerning ship's safety and operation and to express himself clearly in his communications with other ships or coast stations. Ability to understand and use the IMCO Standard Marine Navigational Vocabulary.

17. Ship construction.

General knowledge of the principal structural members of a ship and the proper names of the various parts.

18. Cargo handling and stowage.

Knowledge of safe handling and stowage of cargoes and the effect of these factors on the safety of the ship.

19. Medical aid.

Practical application of medical guides and advice by radio, including the ability to take effective action based on such knowledge in the case of accidents or illnesses that are likely to occur on board ship.

20. Soek-en-redding.

Kennis van die IMCO Merchant Ship Search and Rescue Manual (MERSAR).

21. Voorkoming van besoedeling van die mariene omgewing.

Kennis van die voorsorg wat getref moet word om besoedeling van die mariene omgewing te voorkom.

Regulasie II/5

Verpligte minimum vereistes om die voortgesette bedrewenheid en bywerk van kennis vir gesagvoerders en dekkoffisiere te verseker

1. Van elke gesagvoerder en elke dekkoffisier wat oor 'n sertifikaat beskik en wat op see in diens is of daarheen wil terugkeer na 'n tydperk aan wal, moet daar vereis word dat hy, ten einde steeds vir diens op see te kwalifiseer, met gereelde tussenpose van hoogstens vyf jaar die Administrasie oortuig van sy—

(a) mediese geskiktheid, veral betreffende gesig en gehoor; en

(b) professionele bekwaamheid—

(i) deur goedgekeurde diens op see as gesagvoerder of dekkoffisier van minstens een jaar gedurende die voorafgaande vyf jaar; of

(ii) op grond daarvan dat hy funksies vervul het wat verband hou met die toepaslike pligte van die graad van die sertifikaat waarvoor hy beskik en wat geag word ten minste gelykwaardig te wees met die diens op see vereis in paragraaf 1 (b) (i); of

(iii) deur een van die volgende:

—Deur in 'n goedgekeurde toets te slaag; of

—'n goedgekeurde kursus of kursusse met welslae te deurloop; of

—deurdat hy goedgekeurde diens op see voltooi het as dekkoffisier vir 'n tydperk van minstens drie maande in 'n botallige hoedanigheid onmiddellik voordat hy die rang opgeneem het waarop hy ooreenkomstig sy sertifikaat geregtig is.

2. Die Administrasie moet, in oorleg met die betrokkenes, 'n struktuur van opknappings- en bygewerkte kursusse formuleer of die formulering daarvan bevorder, of vrywillig of verpligtend, soos toepaslik, vir gesagvoerders en dekkoffisiere wat op see in diens is, veral vir persone wat diens op see hervat. Die Administrasie moet daarvoor sorg dat reëlings getref word wat dit vir alle betrokkenes moontlik maak om sodanige kursusse by te woon ooreenkomstig hulle ervaring en pligte. Sodanige kursusse moet deur die Administrasie goedgekeur word en verandering insluit in marinetechnologie en toepaslike internasionale regulasies en aanbevelings rakende die beveiliging van menselewens op see en die beskerming van die mariene omgewing.

3. Vir voortgesette diens op see aan boord van skepe waarvoor spesiale opleidingsvereistes internasionaal aanvaar is, moet elke gesagvoerder en dekkoffisier goedgekeurde toepaslike opleiding met welslae deurloop.

4. Die Administrasie moet daarvoor sorg dat die tekste van onlangse wysigings aan internasionale regulasies betreffende die beveiliging van menselewens op see en die beskerming van die mariene omgewing beskikbaar gestel word aan skepe onder sy jurisdiksie.

Regulasie II/6

Verpligte minimum vereistes vir matrose wat deel uitmaak van 'n navigasiewag

1. Die minimum vereistes vir 'n matros wat deel uitmaak van 'n navigasiewag op 'n seeskip van 200 bruto register ton of groter, word in paragraaf 2 uiteengesit.

20. Search and rescue.

Knowledge of the IMCO Merchant Ship Search and Rescue Manual (MERSAR).

21. Prevention of pollution of the marine environment.

Knowledge of the precautions to be observed to prevent pollution of the marine environment.

Regulation II/5

Mandatory minimum requirements to ensure the continued proficiency and updating of knowledge for masters and deck officers

1. Every master and every deck officer holding a certificate who is serving at sea or intends to return to sea after a period ashore shall, in order to continue to qualify for sea-going service, be required at regular intervals not exceeding five years to satisfy the Administration as to—

(a) medical fitness, particularly regarding eyesight and hearing; and

(b) professional competence—

(i) by approved sea-going service as master or deck officer of at least one year during the preceding five years; or

(ii) by virtue of having performed functions relating to the duties appropriate to the grade of certificate held which are considered to be at least equivalent to the sea-going service required in paragraph 1 (b) (i); or

(iii) by one of the following:

—Passing an approved test; or

—successfully completing an approved course or courses; or

—having completed approved sea-going service as a deck officer for a period of not less than three months in a supernumerary capacity immediately prior to taking up the rank to which he is entitled by virtue of his certificate.

2. The Administration shall, in consultation with those concerned, formulate or promote the formulation of a structure of refresher and updating courses, either voluntary or mandatory, as appropriate, for masters and deck officers who are serving at sea, especially for re-entrants to sea-going service. The Administration shall ensure that arrangements are made to enable all persons concerned to attend such courses as appropriate to their experience and duties. Such courses shall be approved by the Administration and include changes in marine technology and relevant international regulations and recommendations concerning the safety of life at sea and the protection of the marine environment.

3. Every master and deck officer shall, for continuing sea-going service on board ships for which special training requirements have been internationally agreed upon, successfully complete an approved relevant training.

4. The Administration shall ensure that the texts of recent changes in international regulations concerning the safety of life at sea and the protection of the marine environment are made available to ships under its jurisdiction.

Regulation II/6

Mandatory minimum requirements for ratings forming part of a navigational watch

1. The minimum requirements for a rating forming part of a navigational watch on a sea-going ship of 200 gross register tons or more are set out in paragraph 2. These

Hierdie vereistes is nie dié vir die diplomering van volle matrose* nie, en hulle is ook nie, uitgesonderd vir skepe van beperkte grootte, minimum vereistes vir 'n matroos wat die enigste matroos op 'n navigasiewag moet wees nie. Administrasies kan bykomende opleiding en kwalifikasies vir 'n matroos vereis wat die enigste matroos op 'n navigasiewag moet wees.

2. Elke matroos wat deel uitmaak van 'n navigasiewag op 'n seeskop van 200 bruto registerton of groter moet—

- (a) minstens 16 jaar oud wees;
- (b) die Administrasie oortuig van sy mediese geskiktheid, in die besonder betreffende gesig en gehoor;
- (c) die Administrasie oortuig dat hy—
 - (i) goedgekeurde diens op see voltooi het, met inbegrip van minstens ses maande se diens op see wat in die besonder verband hou met navigasiewagpligte; of
 - (ii) met welslae spesiale opleiding deurloop het, of voorsese opleiding of aan boord van 'n skip, met inbegrip van 'n toereikende tydperk van diens op see wat die Administrasie vereis, wat oor minstens twee maande moet strek;
- (d) oor ondervinding of opleiding beskik wat die volgende insluit:
 - (i) Grondbeginsels van brandbestryding, noodhulp, persoonlike oorlewings tegnieke, gesondheidsgevaare en persoonlike veiligheid;
 - (ii) die vermoë om bevele te verstaan en homself verstaanbaar uit te druk teenoor die offisier van die wag in sake wat met sy pligte verband hou;
 - (iii) die vermoë om te stuur en aan roerbevele te voldoen, tesame met toereikende kennis van magnetiese en tolkompasse vir die uitvoering van hierdie pligte;
 - (iv) die vermoë om by wyse van gesig en gehoor 'n behoorlike uitkykwag te hou en die benaderde peiling van 'n klanksein, lig of ander objek in grade of kompasstreke te rapporteer;
 - (v) vertroudheid met die oorsakeling van outomatiese loods na handstuur en andersom;
 - (vi) kennis van die gebruik van die toepaslike interne kommunikasie- en alarmstelsels;
 - (vii) kennis van vuurwerk-noodseine;
 - (viii) kennis van sy noodpligte;
 - (ix) kennis van skeepsterme en -omskrywings ooreenkomstig sy pligte.

3. Die ondervinding, diens of opleiding, vereis in paragrafe 2 (c) en (d), kan verkry word deur die vervulling van pligte wat verband hou met navigasiewaghouding, maar dan slegs indien sodanige pligte uitgevoer word onder direkte toesig van die gesagvoerder, offisier in bevel van die navigasiewag of 'n gekwalifiseerde matroos.

4. Administrasies moet toesien dat 'n gemagtigde dokument uitgereik word aan elke seevaarder wat deur ervaring of opleiding ooreenkomstig hierdie Regulasie gekwalifiseer is om te dien as matroos wat deel uitmaak van 'n navigasiewag, of dat sy bestaande dokument behoorlik geëndosseer word.

5. 'n Seevaarder kan deur die Administrasie geag word die vereistes van hierdie Regulasie na te gekom het indien hy in 'n toepaslike hoedanigheid in die dekadefdeling gedien het vir 'n tydperk van minstens een jaar binne die vyf jaar wat die inwerkingtreding van die Konvensie vir die Administrasie voorafgaan.

requirements are not those for certification of able seamen*, nor, except for ships of limited size, are they minimum requirements for a rating who is to be the sole rating of a navigational watch. Administrations may require additional training and qualifications for a rating who is to be the sole rating of a navigational watch.

2. Every rating forming part of a navigational watch on a sea-going ship of 200 gross register tons or more shall—

- (a) be not less than 16 years of age;
- (b) satisfy the Administration as to medical fitness, particularly regarding eyesight and hearing;
- (c) satisfy the Administration that he has—
 - (i) completed approved sea-going service, including not less than six months' sea experience associated, in particular, with navigational watchkeeping duties; or
 - (ii) successfully undergone special training, either pre-sea or aboard ship, including an adequate period of sea-going service as required by the Administration which shall be not less than two months;
- (d) have experience or training which includes—
 - (i) basic principles of fire-fighting, first aid, personal survival techniques, health hazards and personal safety;
 - (ii) ability to understand orders and make himself understood by the officer of the watch in matters relevant to his duties;
 - (iii) ability to steer and comply with helm orders, together with sufficient knowledge of magnetic and gyro compasses for performance of these duties;
 - (iv) ability to keep a proper look-out by sight and hearing and report the approximate bearing of a sound signal, light or other object in degrees or points;
 - (v) familiarity with the change-over from automatic pilot to hand steering and vice-versa;
 - (vi) knowledge of the use of appropriate internal communication and alarm systems;
 - (vii) knowledge of pyrotechnic distress signals;
 - (viii) knowledge of his emergency duties;
 - (ix) knowledge of shipboard terms and definitions appropriate to his duties.

3. The experience, service or training required by paragraphs 2 (c) and (d) may be acquired through performance of duties associated with navigational watchkeeping, but only if such duties are carried out under the direct supervision of the master, officer in charge of the navigational watch or a qualified rating.

4. Administrations shall ensure that an authorized document is issued to every seafarer who by experience or training is qualified in accordance with this Regulation to serve as a rating forming part of a navigational watch, or that his existing document is duly endorsed.

5. A seafarer may be considered by the Administration to have met the requirements of this Regulation if he has served in a relevant capacity in the deck department for a period of not less than one year within the last five years preceding the entry into force of the Convention for that Administration.

* Hier word verwys na die ILO Certification of Able Seamen Convention, 1946, of 'n daaropvolgende konvensie.

* Reference is made to ILO Certification of Able Seamen Convention, 1946 or any successive convention.

Regulasie II/7*Grondbeginsels waaraan gehou moet word by waghouding in 'n hawe*

1. Op 'n skip wat in normale omstandighede veilig vasgemeer of veilig voor anker lê in 'n hawe, moet die gesagvoerder reël dat 'n gepaste en doeltreffende wag gehandhaaf word vir veiligheidsdoeleindes.

2. By die organisering van die wagte moet daar kennis geneem word van die bepalings van die "Aanbeveling betreffende beginsels en operasionele voorligting vir dekokoffisiere in bevel van 'n hawewag" en die "Aanbeveling betreffende beginsels en operasionele voorligting vir ingenieuroffisiere in bevel van 'n hawe-ingenieurswag" aangeneem deur die Internasionale Konferensie insake die Opleiding en Diplomerings van Seevaarders, 1978.

Regulasie II/8*Verpligte minimum vereistes vir 'n hawewag op skepe wat gevaarlike vrag vervoer*

1. Die gesagvoerder van elke skip wat gevaarlike vrag in losmaat vervoer—of dit nou ook al plofbaar, vlambaar of giftig is of kan wees of 'n bedreiging vir die gesondheid of 'n besoedeling van die omgewing is of kan wees—moet daarvoor sorg dat 'n veilige dekwag en 'n veilige ingenieurswag gehandhaaf word deur die onmiddellike beskikbaarheid aan boord van 'n behoorlik gekwalifiseerde offisier of offisiere, en matrose waar toepaslik, selfs wanneer die skip veilig vasgemeer of veilig voor anker in 'n hawe lê.

2. Die gesagvoerder van elke skip wat gevaarlike vrag op 'n ander wyse as in losmaat vervoer—of dit nou ook al plofbaar, vlambaar of giftig is of kan wees of 'n bedreiging vir die gesondheid of 'n besoedeling van die omgewing is of kan wees—moet by die organisering van veilige waggelings ten volle rekening hou met die aard, hoeveelheid, verpakking en stuwings van die gevaarlike vrag en van enige spesiale toestande aan boord, op die water en aan wal.

3. By die organisering van die wagte moet daar ten volle rekening gehou word met die "Aanbeveling betreffende beginsels en operasionele voorligting vir dekokoffisiere in bevel van 'n hawewag" en die "Aanbeveling betreffende beginsels en operasionele voorligting vir ingenieuroffisiere in bevel van 'n hawe-ingenieurswag" aangeneem deur die Internasionale Konferensie insake die Opleiding en Diplomerings van Seevaarders, 1978.

HOOFTUK III**INGENIEURSAFDELING****Regulasie III/1***Grondbeginsels waaraan gehou moet word by ingenieurswaghouding*

1. Partye moet die aandag van skeepseienaars, skeepsegebruikers, gesagvoerders, hoofingenieuroffisiere en wagpersoneel vestig op die volgende beginsels waaraan gehou moet word om te verseker dat 'n veilige ingenieurswag te alle tye gehandhaaf word.

2. Soos dit in hierdie Regulasie gebruik word, beteken die term "wag" of 'n groep personeel wat die wag vorm of 'n periode van verantwoordelikheid vir 'n ingenieuroffisier waartydens sy fisieke teenwoordigheid in die masjinerie-ruimte vereis kan word of nie.

3. Met die grondbeginsels, met inbegrip van die volgende maar nie daartoe beperk nie, moet daar op alle skepe rekening gehou word.

Regulation II/7*Basic principles to be observed in keeping a watch in port*

1. On any ship safely moored or safely at anchor under normal circumstances in port, the master shall arrange for an appropriate and effective watch to be maintained for the purpose of safety.

2. In organizing the watches note shall be taken of the provisions of the "Recommendation on Principles and Operational Guidance for Deck Officers in Charge of a Watch in Port" and the "Recommendation on Principles and Operational Guidance for Engineer Officers in Charge of an Engineering Watch in Port" adopted by the International Conference on Training and Certification of Seafarers, 1978.

Regulation II/8*Mandatory minimum requirements for a watch in port on ships carrying hazardous cargo*

1. The master of every ship carrying cargo in bulk that is hazardous—whether it is, or may be, explosive, flammable, toxic, health-threatening or environment polluting—shall ensure that a safe deck watch and a safe engineering watch are maintained by the ready availability on board of a duly qualified officer or officers, and ratings were appropriate, even when the ship is safely moored or safely at anchor in port.

2. The master of every ship carrying hazardous cargo other than in bulk—whether it is, or may be, explosive, flammable, toxic, health-threatening or environment polluting—shall in organizing safe watchkeeping arrangements take full account of the nature, quantity, packing and stowage of the hazardous cargo and of any special conditions on board, afloat and ashore.

3. In organizing the watches full account shall be taken of the "Recommendation on Principles and Operational Guidance for Deck Officers in Charge of a Watch in Port" and the "Recommendation on Principles and Operational Guidance for Engineer Officers in Charge of an Engineering Watch in Port" adopted by the International Conference on Training and Certification of Seafarers, 1978.

CHAPTER III**ENGINE DEPARTMENT****Regulation III/1***Basic principles to be observed in keeping an engineering watch*

1. Parties shall direct the attention of shipowners, ship operators, masters, chief engineer officers and watchkeeping personnel to the following principles which shall be observed to ensure that a safe engineering watch is maintained at all times.

2. The term "watch" is used in this Regulation to mean either a group of personnel composing the watch or a period of responsibility for an engineer officer during which his physical presence in the machinery space may or may not be required.

3. The basic principles, including but not limited to the following, shall be taken into account on all ships.

4. Algemeen.

(a) Die hoofingenieuroffisier van elke skip is verplig om in oorleg met die gesagvoerder toe te sien dat die wagreelings voldoende is om 'n veilige wag te handhaaf. By die besluit oor die samestelling van die wag, wat gepaste masjienkamergraderings kan insluit, moet daar met onder andere die volgende kriteria rekening gehou word:

- (i) Tipe skip;
- (ii) tipe en toestand van die masjinerie;
- (iii) spesiale wyses van optrede genoodsaak deur toestand soos weer, ys, besoedelde water, vlak water, noodtoestande, skadebeperking of besoedelingsvermindering;
- (iv) kwalifikasies en ervaring van die wag;
- (v) veiligheid van lewens, skip, vrag en hawe en beskerming van die omgewing;
- (vi) nakoming van internasionale, nasionale en plaaslike regulasies;
- (vii) handhawing van die normale funksies van die skip.

(b) Onder bevel van die hoofingenieuroffisier is die ingenieuroffisier in bevel van die wag verantwoordelik vir die inspeksie, werking en toetsing, na gelang dit nodig is, van al die masjinerie en toerusting onder sy toesig. Die ingenieuroffisier in bevel van 'n wag is die hoofingenieuroffisier se verteenwoordiger en sy eerste verantwoordelikheid is te alle tye die veilige en doeltreffende bediening en onderhoud van masjinerie wat die skip se veiligheid raak.

(c) Die hoofingenieuroffisier moet in oorleg met die gesagvoerder vooraf die behoeftes van die voorgenome reis vasstel, met inagneming van die behoeftes aan brandstof, water, smeermiddels, chemikalieë, verbruikbare en ander onderdele, gereedskap, voorraad en alle ander behoeftes.

5. Bediening.

(a) Die ingenieuroffisier in bevel van die wag moet toesien dat die vasgestelde wagreelings gehandhaaf word. Onder sy algemene bevel moet daar van masjienkamergraderings, indien hulle deel van die wag uitmaak, verwag word om te help met die veilige en doeltreffende bediening van die aandrywingsmasjinerie en die hulp-toerusting.

(b) By die aanvang van die ingenieurswag moet die bestaande bedryfsparameters en toestand van alle masjinerie nagegaan word. Van alle masjinerie wat nie behoorlik funksioneer nie, na verwagting nie reg sal funksioneer nie of wat spesiale versiening vereis, moet daar 'n aantekening gemaak word tesame met enige stappe wat reeds gedoen is. Planne moet beraam word vir enige verdere optrede wat nodig mag blyk.

(c) Die ingenieuroffisier in bevel van die wag moet toesien dat die hoofaandrywingsinstallasie en hulpstelsels onder voortdurende waarneming gehou word, dat inspeksies met geskikte tussenpose uitgevoer word van die masjinerie- en stuurinrigtingruimtes en dat gepaste stappe gedoen word om enige gebrekkige funksionering wat aan die lig kom, reg te stel.

(d) Wanneer die masjinerieruimtes in die bemande toestand is, moet die ingenieuroffisier in bevel van die wag te alle tye onmiddellik in staat wees om die aandrywingstoerusting te bedien ter voldoening aan die behoeftes aan rigting- of spoedveranderinge. Wanneer die masjinerieruimtes in die periodieke onbemane toestand is, moet die aangewese diensingenieuroffisier in bevel van die wag onmiddellik beskikbaar en diensgereed wees om aandag te skenk aan die masjinerieruimtes.

4. General.

(a) The chief engineer officer of every ship is bound, in consultation with the master, to ensure that watchkeeping arrangements are adequate to maintain a safe watch. When deciding the composition of the watch, which may include appropriate engine room ratings, the following criteria, *inter alia*, shall be taken into account:

- (i) Type of ship;
- (ii) type and condition of the machinery;
- (iii) special modes of operation dictated by conditions such as weather, ice, contaminated water, shallow water, emergency conditions, damage containment or pollution abatement;
- (iv) qualifications and experience of the watch;
- (v) safety of life, ship, cargo and port, and protection of the environment;
- (vi) observance of international, national and local regulations;
- (vii) maintaining the normal operations of the ship.

(b) Under the direction of the chief engineer officer, the engineer officer in charge of the watch shall be responsible for the inspection, operation and testing, as required, of all machinery and equipment under his responsibility. The engineer officer in charge of a watch is the chief engineer officer's representative and his primary responsibility, at all times, shall be the safe and efficient operation and up-keep of machinery affecting the safety of the ship.

(c) The chief engineer officer shall, in consultation with the master, determine in advance the needs of the intended voyage, taking into consideration the requirements for fuel, water, lubricants, chemicals, expendable and other spare parts, tools, supplies and any other requirements.

5. Operation.

(a) The engineer officer in charge of the watch shall ensure that the established watchkeeping arrangements are maintained. Under his general direction engine room ratings, if forming part of the watch, shall be required to assist in the safe and efficient operation of the propulsion machinery and the auxiliary equipment.

(b) At the commencement of the engineering watch, the current operational parameters and condition of all machinery shall be verified. Any machinery not functioning properly, expected to malfunction or requiring special service, shall be noted along with any action already taken. Plans shall be made for any further action if required.

(c) The engineer officer in charge of the watch shall ensure that the main propulsion plant and auxiliary systems are kept under constant surveillance, inspections are made of the machinery and steering gear spaces at suitable intervals and appropriate action is taken to remedy any malfunction discovered.

(d) When the machinery spaces are in the manned condition, the engineer officer in charge of the watch shall at all times be readily capable of operating the propulsion equipment in response to needs for changes in direction or speed. When the machinery spaces are in the periodic unmanned condition, the designated duty engineer officer in charge of the watch shall be immediately available and on call to attend the machinery spaces.

(e) Alle brugbevele moet stiptelik uitgevoer word. Veranderinge in die rigting of spoed van die hoofaandrywingseenheid moet aangeteken word, uitgesonderd waar 'n Administrasie beslis dat die grootte of eienskappe van 'n besondere skip sodanige rekordhouding onprakties maak. Die ingenieuroffisier in bevel van die wag moet sorg dat die hoofaandrywingseenheid se kontroles, wanneer dit in die handbedieningstoestand is, voortdurende opgepas word in gereedheids- of maneuvreertoestand.

(f) Die ingenieuroffisier in bevel van die wag mag geen ander pligte opgedra word of onderneem wat inbreuk kan maak op sy toesighoudende plig ten opsigte van die hoofaandrywingstelsel en sy bykomende toerusting nie en hy moet sorg dat die hoofaandrywingstelsel en hulptoerusting onder voortdurende waarneming bly totdat hy behoorlik afgelos word.

(g) Behoorlike aandag moet geskenk word aan die onderhoud en bediening van alle masjinerie, insluitende meganiese, elektriese, hidrouliese en druklugstelsels, hulle beheerapparaat en gepaardgaande veiligheidstoerusting, alle toerusting van akkommodasiediensstelsels en die aantekening van voorrade en die gebruik van noodgerei.

(h) Die hoofingenieuroffisier moet sorg dat die ingenieuroffisier in bevel van die wag ingelig is aangaande alle voorkomende onderhoud, lekdienste of herstelwerk wat gedurende die wag verrig moet word. Die ingenieuroffisier in bevel van die wag is verantwoordelik vir die isolering, omleiding en aanpassing van alle masjinerie onder sy beheer waaraan daar gewerk moet word en moet alle werk aanteken wat uitgevoer word.

(i) Voordat hy van diens af gaan, moet die ingenieuroffisier in bevel van die wag toesien dat alle gebeure in verband met die hoof- en hulpmasjinerie op geskikte wyse aangeteken is.

(j) Ten einde enige gevaar vir die veiligheid van die skip en sy bemanning te voorkom, moet die ingenieuroffisier in bevel van die wag die brug onmiddellik in kennis stel ingeval van brand, ophandesynde optredes in masjinerieruimtes wat 'n afname in die skip se spoed kan veroorsaak, dreigende onklaarraking van die stuur, afskakeling van die skip se aandrywingstelsel of enige wysiging in die opwekking van elektriese krag, of 'n soortgelyke bedreiging van die veiligheid. Waar moontlik, moet sodanige kennisgewing geskied voordat die veranderinge aangebring word, ten einde die brug die maksimum beskikbare tyd te gee om die stappe te doen wat ook al moontlik mag wees om 'n eventuele seevaartongeval te verhoed.

(k) Wanneer die masjienkamer in 'n toestand van gereedheid gebring word, moet die ingenieuroffisier in bevel van die wag toesien dat alle masjinerie en toerusting wat tydens maneuvring gebruik mag word, in 'n staat van onmiddellike gereedheid is en dat daar 'n toereikende kragreserwe beskikbaar is vir die stuurinrigting en ander behoeftes.

6. *Wagvereistes.*

(a) Elke lid van die wag moet vertrouwd wees met sy aangewese wagpligte. Daarbenewens moet elke lid ten opsigte van daardie skip—

- (i) kennis dra van die gebruik van gepaste interne kommunikasiestelsels;
- (ii) kennis hê van ontsnaproetes uit masjinerieruimtes;
- (iii) oor kennis beskik van die masjienkamer-alarmstelsels en oor die vermoë om te onderskei tussen die verskillende alarms, in die besonder die CO₂-alarm;
- (iv) kennis dra van die plasing en gebruik van die brandweerapparaat in die masjinerieruimtes.

(e) All bridge orders shall be promptly executed. Changes in direction or speed of the main propulsion unit shall be recorded, except where an Administration determines that the size or characteristics of a particular ship make such recording impracticable. The engineer officer in charge of the watch shall ensure that the main propulsion unit controls, when in the manual mode of operation, are continuously attended under standby or manoeuvring conditions.

(f) The engineer officer in charge of the watch shall not be assigned or undertake any duties which would interfere with his supervisory duty in respect of the main propulsion system and its ancillary equipment and he shall ensure that the main propulsion system and auxiliary equipment are kept under constant surveillance until he is properly relieved.

(g) Due attention shall be paid to the maintenance and support of all machinery, including mechanical, electrical, hydraulic and pneumatic systems, their control apparatus and associated safety equipment, all accommodation service systems equipment and the recording of stores and spare gear usage.

(h) The chief engineer officer shall ensure that the engineer officer in charge of the watch is informed of all preventive maintenance, damage control, or repair operations to be performed during the watch. The engineer officer in charge of the watch shall be responsible for the isolation, by-passing and adjustment of all machinery under his responsibility that is to be worked on, and shall record all work carried out.

(i) Before going off duty, the engineer officer in charge of the watch shall ensure that all events related to the main and auxiliary machinery are suitably recorded.

(j) To avoid any danger to the safety of the ship and its crew, the engineer officer in charge of the watch shall notify the bridge immediately in the event of fire, impending actions in machinery spaces that may cause reduction in ship's speed, imminent steering failure, stoppage of the ship's propulsion system or any alteration in the generation of electric power, or similar threat to safety. This notification, where possible, shall be accomplished before changes are made in order to afford the bridge the maximum available time to take whatever actions are possible to avoid a potential marine casualty.

(k) When the engine room is put in a standby condition, the engineer officer in charge of the watch shall ensure that all machinery and equipment which may be used during manoeuvring is in a state of immediate readiness and that an adequate reserve of power is available for steering gear and other requirements.

6. *Watch requirements.*

(a) Every member of the watch shall be familiar with his assigned watchkeeping duties. In addition, every member shall have with respect to that ship—

- (i) knowledge of the use of appropriate internal communication systems;
- (ii) knowledge of escape routes from machinery spaces;
- (iii) knowledge of engine room alarm systems and the ability to distinguish between the various alarms with special reference to the CO₂ alarm;
- (iv) knowledge of the positions and use of the fire-fighting equipment in the machinery spaces.

(b) Die samestelling van 'n vaartwag moet te alle tye voldoende wees om die veilige werking te verseker van alle masjinerie wat die bedryf van die skip raak, of dit nou ook al in die outomatiese of handbedieningstoestand is, geskik is vir die heersende omstandighede en toestande. Om dit te bewerkstellig, moet daar met onder andere die volgende rekening gehou word:

- (i) Voldoende toesig te alle tye oor masjinerie wat die veilige bedryf van die skip raak;
- (ii) toestand en betroubaarheid van enige afstandbeheerde aandrywings- en stuurtoerusting en hulle kontroles, kontroleplasing en die prosedures by hulle oorskakeling na handbediening in die geval van onklaarraking of nood;
- (iii) plasing en gebruik van vaste brandopsporings-, brandblus- of brandbeperkingsstoestelle en -apparaat;
- (iv) gebruik en werkende toestand van hulp-, reserve- en noodtoerusting wat die veilige navigasie-, vasmeer- of dok-operasies van die skip raak;
- (v) stappe en prosedures wat nodig is om die toestand van masjinerie-installasies te handhaaf ten einde hulle doeltreffende werking te verseker gedurende alle vorms van skeepsoperasies;
- (vi) enige ander eise aan die wag wat uit spesiale bedryfstoeestand mag spruit.

(c) By 'n onbeskutte ankerplek moet die hoofingenieur-offisier die gesagvoerder raadpleeg oor die noodsaaklikheid daarvan al dan nie om 'n vaartwag te handhaaf.

7. Geskiktheid vir diens.

Die wagstelsel moet sodanig wees dat die doeltreffendheid van die wag nie deur uitputting belemmer word nie. Die hoofingenieur-offisier moet die pligte so organiseer dat die eerste wag by die aanvang van 'n vaart en die daaropvolgende afloswagte genoegsaam uitgerus en andersins geskik vir diens is.

8. Beskerming van die mariene omgewing.

Alle ingenieur-offisiere en masjienkamer-matrose moet bewus wees van die ernstige uitwerking van operasionele of aksidentele besoedeling van die mariene omgewing en moet alle moontlike voorsorg tref om sodanige besoedeling te voorkom, in die besonder binne die raamwerk van toepaslike internasionale en haweregulasies.

Regulasie III/2

Verpligte minimum vereistes vir die diplomering van hoofingenieur-offisiere en tweede ingenieur-offisiere van skepe aangedryf deur hoofaandrywingsmasjinerie van 3 000 kW aandrywingskrag of meer

1. Elke hoofingenieur-offisier en tweede ingenieur-offisier van 'n seeskip aangedryf deur hoofaandrywingsmasjinerie van 3 000 kW aandrywingskrag of meer moet oor 'n toepaslike sertifikaat beskik.

2. Elke kandidaat vir diplomering moet—

- (a) die Administrasie oortuig van sy mediese geskiktheid, insluitende gesig en gehoor;
- (b) aan die vereistes voldoen vir diplomering as 'n ingenieur-offisier in bevel van 'n wag; en
 - (i) vir diplomering as tweede ingenieur-offisier, minstens 12 maande se goedgekeurde diens op see agter die rug hê as assistent-ingenieur-offisier of ingenieur-offisier;
 - (ii) vir diplomering as hoofingenieur-offisier, minstens 36 maande se goedgekeurde diens op see agter die rug hê, waarvan minstens 12 maande diens moet wees as 'n ingenieur-offisier in 'n verantwoordelike posisie terwyl hy reeds gekwalifiseer was om as tweede ingenieur-offisier te dien;

(b) The composition of an underway watch shall, at all times, be adequate to ensure the safe operation of all machinery affecting the operation of the ship, in either automated or manual mode and be appropriate to the prevailing circumstances and conditions. To achieve this, the following, *inter alia*, shall be taken into account:

- (i) Adequate supervision, at all times, of machinery affecting the safe operation of the ship;
- (ii) condition and reliability of any remotely operated propulsion and steering equipment and their controls, control location and the procedures involved in placing them in a manual mode of operation in the event of break-down or emergency;
- (iii) location and operation of fixed fire detection, fire extinction or fire containment devices and apparatus;
- (iv) use and operational condition of auxiliary, standby and emergency equipment affecting the safe navigation, mooring or docking operations of the ship;
- (v) steps and procedures necessary to maintain the condition of machinery installations in order to ensure their efficient operation during all modes of ship operation;
- (vi) any other demands on the watch which may arise as a result of special operating circumstances.

(c) At an unsheltered anchorage the chief engineer officer shall consult with the master whether or not to maintain an underway watch.

7. Fitness for duty.

The watch system shall be such that the efficiency of the watch is not impaired by fatigue. Duties shall be so organized by the chief engineer officer that the first watch at the commencement of a voyage and the subsequent relieving watches are sufficiently rested and otherwise fit for duty.

8. Protection of the marine environment.

All engineer officers and engine room ratings shall be aware of the serious effects of operational or accidental pollution of the marine environment and shall take all possible precautions to prevent such pollution, particularly within the framework of relevant international and port regulations.

Regulation III/2

Mandatory minimum requirements for certification of chief engineer officers and second engineer officers of ships powered by main propulsion machinery of 3 000 kW propulsion power or more

1. Every chief engineer officer and second engineer officer of a sea-going ship powered by main propulsion machinery of 3 000 kW propulsion power or more shall hold an appropriate certificate.

2. Every candidate for certification shall—

- (a) satisfy the Administration as to medical fitness, including eyesight and hearing;
- (b) meet the requirements for certification as an engineer officer in charge of a watch; and
 - (i) for certification as second engineer officer, have not less than 12 months' approved sea-going service as assistant engineer officer or engineer officer;
 - (ii) for certification as chief engineer officer, have not less than 36 months' approved sea-going service of which not less than 12 months shall be served as an engineer officer in a position of responsibility while qualified to serve as second engineer officer;

- (c) 'n goedgekeurde praktiese brandweerkursus byge-
woon het;
 - (d) in die toepaslike eksamen geslaag het tot tevrede-
heid van die Administrasie. Sodanige eksamen moet die
materiaal insluit wat uiteengesit word in die Byvoeg-
sel van hierdie Regulasie, uitgesonderd dat die Admi-
nistrasie hierdie eksamenvereistes kan aanpas vir offi-
siere van skepe met beperkte aandrywingskrag wat op
kusvaarte gebruik word, na gelang hy dit nodig ag,
met inagneming van die uitwerking op die veiligheid
van alle skepe wat in dieselfde waters mag vaar.
3. Opleiding ter bereiking van die nodige teoretiese ken-
nis en praktiese ondervinding moet rekening hou met toe-
paslike internasionale regulasies en aanbevelings.
4. Die vereiste kennisvlak ingevolge die verskillende
paragrafe van die Byvoegsel kan aangepas word afhang-
ende daarvan of die sertifikaat uitgereik word op die vlak
van hoofingenieuroffisier of tweede ingenieuroffisier.

BYVOEGSEL VAN REGULASIE III/2

Minimum vereiste kennis vir die diplomering van hoofinge-
neuroffisiere en tweede ingenieuroffisiere van skepe aange-
dryf deur hoofaandrywingsmasjinerie van 3 000 kW aan-
drywingskrag of meer

1. Die leerplan hieronder is saamgestel vir die eksamine-
ring van kandidate vir diplomering as hoofingenieuroffisier
of tweede ingenieuroffisier van skepe aangedryf deur
hoofaandrywingsmasjinerie van 3 000 kW aandrywings-
krag of meer. Gedagtig daaraan dat 'n tweede ingenieuroffi-
sier in staat moet wees om te eniger tyd die verantwoorde-
likhede van 'n hoofingenieuroffisier oor te neem, moet die
eksaminering in hierdie vakke daarop ingestel wees om die
kandidaat se vermoë te toets om alle beskikbare inligting te
assimileer wat die veilige werking van die skip se masjine-
rie raak.

2. Met betrekking tot paragraaf 4 (a) hieronder kan die
Administrasie kennisvereistes weglaat vir ander tipes aan-
drywingsmasjinerie as die masjinerie-installasies waarvoor
die sertifikaat wat uitgereik moet word, geldig is. 'n Sertifi-
kaat wat op dié grondslag uitgereik word, is nie geldig vir 'n
ander kategorie masjinerie-installasie, wat uitgelaat is,
voordat die ingenieuroffisier tot tevredeheid van die Admi-
nistrasie bewys lewer dat hy bekwaam is in hierdie items
nie. Alle sodanige beperkings moet op die sertifikaat aan-
gebring word.

3. Elke kandidaat moet oor teoretiese kennis in die vol-
gende vakke beskik:

- (a) Termodinamika en warmteoordrag;
- (b) meganika en hidromeganika;
- (c) bedryfsbeginsels van skepe se kraginstallasies (diesel,
stoom en gasturbine) en verkoeling;
- (d) fisiese en chemiese eienskappe van brandstowwe en
smeermiddels;
- (e) materiaaltegnologie;
- (f) chemie en fisika van brande en blusmiddels;
- (g) marine-elektrotegnologie, -elektronika en -elektriese
toerusting;
- (h) grondbeginsels van outomatisering, instrumentasie en
kontrolestelsels;
- (i) skeepsboukunde en skeepskonstruksie, met inbegrip
van lekdienste.

4. Elke kandidaat moet oor toereikende praktiese kennis
in ten minste die volgende vakke beskik:

- (a) Bediening en onderhoud van—
 - (i) marine-dieselenjins;
 - (ii) marine-stoomaandrywingsinstallasies;
 - (iii) marine-gasturbines;

(c) have attended an approved practical fire-fighting
course;

(d) have passed appropriate examination to the satisfac-
tion of the Administration. Such examination shall
include the material set out in the Appendix to this
Regulation, except that the Administration may vary
these examination requirements for officers of ships
with limited propulsion power that are engaged on
near-coastal voyages, as it considers necessary, bear-
ing in mind the effect on the safety of all ships which
may be operating in the same waters.

3. Training to achieve the necessary theoretical know-
ledge and practical experience shall take into account rele-
vant international regulations and recommendations.

4. The level of knowledge required under the different
paragraphs of the Appendix may be varied according to
whether the certificate is being issued at chief engineer
officer or second engineer officer level.

APPENDIX TO REGULATION III/2

Minimum knowledge required for certification of chief en-
gineer officers and second engineer officers of ships po-
wered by main propulsion machinery of 3 000 kW propul-
sion power or more

1. The syllabus given below is compiled for examination
of candidates for certification as chief engineer officer or
second engineer officer of ships powered by main propul-
sion machinery of 3 000 kW propulsion power or more.
Bearing in mind that a second engineer officer shall be in a
position to assume the responsibilities of a chief engineer
officer at any time, examination in these subjects shall be
designed to test the candidate's ability to assimilate all
available information that affects the safe operation of the
ship's machinery.

2. With respect to paragraph 4 (a) below, the Administra-
tion may omit knowledge requirements for types of propul-
sion machinery other than those machinery installations for
which the certificate to be awarded shall be valid. A certifi-
cate awarded on such a basis shall not be valid for any
category of machinery installation which has been omitted
until the engineer officer proves to be competent in these
items to the satisfaction of the Administration. Any such
limitation shall be stated in the certificate.

3. Every candidate shall possess theoretical knowledge in
the following subjects:

- (a) Thermodynamics and heat transmission;
- (b) mechanics and hydromechanics;
- (c) operational principles of ships' power installations
(diesel, steam and gas turbine) and refrigeration;
- (d) physical and chemical properties of fuels and lubri-
cants;
- (e) technology of materials;
- (f) chemistry and physics of fire and extinguishing
agents;
- (g) marine electrotechnology, electronics and electrical
equipment;
- (h) fundamentals of automation, instrumentation and
control systems;
- (i) naval architecture and ship construction, including
damage control.

4. Every candidate shall possess adequate practical
knowledge in at least the following subjects:

- (a) Operation and maintenance of—
 - (i) marine diesel engines;
 - (ii) marine steam propulsion plant;
 - (iii) marine gas turbines;

- (b) bediening en onderhoud van hulpmasjinerie, met inbegrip van pomp- en pypstelsels, hulpketelinstallasies en stuurinrigtingstelsels;
- (c) bediening, toetsing en onderhoud van elektriese en kontroletoerusting;
- (d) bediening en onderhoud van vraghanteringstoerusting en dekmasjinerie;
- (e) bespeuring van foutwerking by masjinerie, opsporing van foute en optrede om skade te voorkom;
- (f) organisasie van veilige onderhouds- en herstelprosedures;
- (g) metodes van en hulpmiddels vir brandvoorkoming, -bespeuring en -blussing;
- (h) metodes en hulpmiddels om besoedeling van die omgewing deur skepe te voorkom;
- (i) regulasies wat nagekom moet word om besoedeling van die mariene omgewing te voorkom;
- (j) uitwerking van seebesoedeling op die omgewing;
- (k) noodhulp met betrekking tot beserings wat waarskynlik in masjinerieruimtes kan voorkom en die gebruik van noodhulptoerusting;
- (l) funksies en aanwending van reddingstoestelle;
- (m) lekdiensmetodes;
- (n) veilige werkpraktyke.

5. Elke kandidaat moet beskik oor kennis van die internasionale maritieme reg soos beliggaam in internasionale ooreenkomste en konvensies in die mate waarin hulle betrekking het op die uitdruklike verpligtinge en verantwoordelikhede van die ingenieursafdeling, in die besonder dié rakende veiligheid en die beskerming van die mariene omgewing. Die mate van kennis van nasionale maritieme wetgewing word aan die Administrasie se oordeel oorgelaat, maar moet nasionale reëlings insluit vir die toepassing van internasionale ooreenkomste en konvensies.

6. Elke kandidaat moet oor kennis beskik aangaande personeelbestuur, -organisasie en -opleiding aan boord van skepe.

Regulasie III/3

Verpligte minimum vereistes vir die diplomering van hoofingenieuroffisiere en tweede ingenieuroffisiere van skepe aangedryf deur hoofaandrywingsmasjinerie van tussen 750 kW en 3 000 kW aandrywingskrag

1. Elke hoofingenieuroffisier en tweede ingenieuroffisier van 'n seeskop aangedryf deur hoofaandrywingsmasjinerie van tussen 750 en 3 000 kW aandrywingskrag moet oor 'n toepaslike sertifikaat beskik.

2. Elke kandidaat vir diplomering moet—

- (a) die Administrasie oortuig van sy mediese geskiktheid, insluitende gesig en gehoor;
- (b) aan die vereistes voldoen vir diplomering as 'n ingenieuroffisier in bevel van 'n wag; en
 - (i) vir diplomering as tweede ingenieuroffisier minstens 12 maande se goedgekeurde diens op see agter die rug hê as assistent-ingenieuroffisier of ingenieuroffisier;
 - (ii) vir diplomering as hoofingenieuroffisier minstens 24 maande se goedgekeurde diens op see agter die rug hê, waarvan minstens 12 maande diens moet wees terwyl hy reeds gekwalifiseer was om as tweede ingenieuroffisier te dien;
- (c) 'n goedgekeurde praktiese brandweerkursus bygewoon het;

- (b) operation and maintenance of auxiliary machinery, including pumping and piping systems, auxiliary boiler plant and steering gear systems;
- (c) operation, testing and maintenance of electrical and control equipment;
- (d) operation and maintenance of cargo handling equipment and deck machinery;
- (e) detection of machinery malfunction, location of faults and action to prevent damage;
- (f) organization of safe maintenance and repair procedures;
- (g) methods of, and aids for, fire prevention, detection and extinction;
- (h) methods and aids to prevent pollution of the environment by ships;
- (i) regulations to be observed to prevent pollution of the marine environment;
- (j) effects of marine pollution on the environment;
- (k) first aid related to injuries which might be expected in machinery spaces and use of first aid equipment;
- (l) functions and use of life-saving appliances;
- (m) methods of damage control;
- (n) safe working practices.

5. Every candidate shall possess a knowledge of international maritime law embodied in international agreements and conventions as they affect the specific obligations and responsibilities of the engine department, particularly those concerning safety and the protection of the marine environment. The extent of knowledge of national maritime legislation is left to the discretion of the Administration but shall include national arrangements for implementing international agreements and conventions.

6. Every candidate shall possess a knowledge of personnel management, organization and training aboard ships.

Regulation III/3

Mandatory minimum requirements for certification of chief engineer officers and second engineer officers of ships powered by main propulsion machinery between 750 kW and 3 000 kW propulsion power

1. Every chief engineer officer and second engineer officer of a sea-going ship powered by main propulsion machinery of between 750 and 3 000 kW propulsion power shall hold an appropriate certificate.

2. Every candidate for certification shall—

- (a) satisfy the Administration as to medical fitness, including eyesight and hearing;
- (b) meet the requirements for certification as an engineer officer in charge of a watch; and
 - (i) for certification as second engineer officer, have not less than 12 months' approved sea-going service as assistant engineer officer or engineer officer;
 - (ii) for certification as chief engineer officer, have not less than 24 months' approved sea-going service of which not less than 12 months shall be served while qualified to serve as second engineer officer;
- (c) have attended an approved practical fire-fighting course;

(d) in die toepaslike eksamen geslaag het tot tevredenheid van die Administrasie. Sodanige eksamen moet die materiaal insluit wat uiteengesit word in die Byvoegsel van hierdie Regulasie, uitgesonderd dat die Administrasie hierdie eksamen- en seediensvereistes kan aanpas vir offisiere van skepe wat op kusvaarte gebruik word, met inagneming van die tipes outomatiese en afstandbeheerde kontroles waarmee die skepe toegerus is en die uitwerking op die veiligheid van alle skepe wat in dieselfde waters mag vaar.

3. Opleiding ter bereiking van die nodige teoretiese kennis en praktiese ondervinding moet rekening hou met toepaslike internasionale regulasies en aanbevelings.

4. Die vereiste kennisvlak ingevolge die verskillende paragrawe van die Byvoegsel kan aangepas word afhange daarvan of die sertifikaat uitgereik word op die vlak van hoofingenieuroffisier of tweede ingenieuroffisier.

5. Elke ingenieuroffisier wat gekwalifiseer is om te dien as tweede ingenieuroffisier van skepe aangedryf deur hoofaandrywingsmasjinerie van 3 000 kW aandrywingskrag of meer, kan as hoofingenieuroffisier dien van skepe aangedryf deur hoofaandrywingsmasjinerie van minder as 3 000 kW aandrywingskrag, mits minstens 12 maande se goedgekeurde diens op see verrig is as ingenieuroffisier in 'n verantwoordelike posisie.

BYVOEGSEL VAN REGULASIE III/3

Minimum vereiste kennis vir diplomering van hoofingenieuroffisiere en tweede ingenieuroffisiere van skepe aangedryf deur hoofaandrywingsmasjinerie van tussen 750 kW en 3 000 kW aandrywingskrag

1. Die leerplan hieronder is opgestel vir die eksaminering van kandidate vir diplomering as hoofingenieuroffisier of tweede ingenieuroffisier van skepe aangedryf deur hoofaandrywingsmasjinerie van tussen 750 kW en 3 000 kW aandrywingskrag. Gedagtig daaraan dat 'n tweede ingenieuroffisier in staat moet wees om te eniger tyd die verantwoordelikhede van 'n hoofingenieuroffisier oor te neem, moet die eksaminering in hierdie vakke daarop ingestel wees om die kandidaat se vermoë te toets om alle beskikbare inligting te assimileer wat die veilige werking van die skip se masjinerie raak.

2. Met betrekking tot paragrawe 3 (d) en 4 (a) hieronder kan die Administrasie kennisvereistes weglaat vir ander tipes aandrywingsmasjinerie as die masjinerie-inrigtings waarvoor die sertifikaat wat uitgereik moet word, geldig is. 'n Sertifikaat wat op dié grondslag uitgereik word, is nie geldig vir 'n ander kategorie masjinerie-inrigting, wat uitgeleat is, voordat die ingenieuroffisier tot tevredenheid van die Administrasie bewys lewer dat hy bekwaam is in hierdie items nie. Alle sodanige beperkings moet op die sertifikaat aangebring word.

3. Elke kandidaat moet oor genoegsame elementêre teoretiese kennis beskik om die basiese beginsels betrokke by die volgende vakke te verstaan:

- (a) Verbrandingsprosesse;
- (b) warmteoordrag;
- (c) meganika en hidromeganika;
- (d) (i) marine-dieselenjins;
- (ii) marine-stoomaandrywingsaanleg;
- (iii) marine-gasturbines;
- (e) stuurinrigtingstelsels;
- (f) eienskappe van brandstowwe en smeermiddels;
- (g) eienskappe van materiale;
- (h) brandblusmiddels;
- (i) marine elektriese toerusting;
- (j) outomatisasie, instrumentasie en kontrolestelsels;
- (k) skeepskonstruksie, insluitende lekdiens;e;
- (l) hulpstelsels.

(d) have passed appropriate examination to the satisfaction of the Administration. Such examination shall include the material set out in the Appendix to this Regulation, except that the Administration may vary the requirements for examination and sea-going service for officers of ships engaged on near-coastal voyages, bearing in mind the types of automatic and remotely operated controls with which such ships are fitted and the effect on the safety of all ships which may be operating in the same waters.

3. Training to achieve the necessary theoretical knowledge and practical experience shall take into account relevant international regulations and recommendations.

4. The level of knowledge required under the different paragraphs of the Appendix may be varied according to whether the certificate is being issued at chief engineer officer or second engineer officer level.

5. Every engineer officer who is qualified to serve as second engineer officer of ships powered by main propulsion machinery of 3 000 kW propulsion power or more, may serve as chief engineer officer of ships powered by main propulsion machinery of less than 3 000 kW propulsion power provided that not less than 12 months' approved sea-going service shall have been served as an engineer officer in a position of responsibility.

APPENDIX TO REGULATION III/3

Minimum knowledge required for certification of chief engineer officers and second engineer officers of ships powered by main propulsion machinery of between 750 kW and 3 000 kW propulsion power

1. The syllabus given below is compiled for examination of candidates for certification as chief engineer officer or second engineer officer of ships powered by main propulsion machinery of between 750 kW and 3 000 kW propulsion power. Bearing in mind that a second engineer officer shall be in a position to assume the responsibilities of the chief engineer officer at any time, examination in these subjects shall be designed to test the candidate's ability to assimilate all available information that affects the safe operation of the ship's machinery.

2. With respect to paragraphs 3 (d) and 4 (a) below, the Administration may omit knowledge requirements for types of propulsion machinery other than those machinery installations for which the certificate to be awarded shall be valid. A certificate awarded on such a basis shall not be valid for any category of machinery installation which has been omitted until the engineer officer proves to be competent in these items to the satisfaction of the Administration. Any such limitation shall be stated in the certificate.

3. Every candidate shall possess sufficient elementary theoretical knowledge to understand the basic principles involved in the following subjects:

- (a) Combustion processes;
- (b) heat transmission;
- (c) mechanics and hydromechanics;
- (d) (i) marine diesel engines;
- (ii) marine steam propulsion plant;
- (iii) marine gas turbines;
- (e) steering gear systems;
- (f) properties of fuels and lubricants;
- (g) properties of materials;
- (h) fire-extinguishing agents;
- (i) marine electrical equipment;
- (j) automation, instrumentation and control systems;
- (k) ship construction, including damage control;
- (l) auxiliary systems.

4. Elke kandidaat moet oor voldoende praktiese kennis in ten minste die volgende vakke beskik:

- (a) Bediening en onderhoud van—
 - (i) marine-dieselenjins;
 - (ii) marine-stoomaandrywingsaanlegte;
 - (iii) marine-gasturbines;
- (b) bediening en onderhoud van hulpmasjineriestelsels, insluitende stuurinrigtingstelsels;
- (c) bediening, toetsing en onderhoud van elektriese en kontroletoerusting;
- (d) bediening en onderhoud van vraghanteringstoerusting en dekmasjinerie;
- (e) bespeuring van masjinerie-foutwerking, opsporing van foute en optrede om skade te voorkom;
- (f) organisering van veilige onderhouds- en herstelprosedures;
- (g) metodes van en hulpmiddels vir brandvoorkoming, -bespeuring en -blussing;
- (h) regulasies waarby gehou moet word betreffende besoedeling van die mariene omgewing en metodes en hulpmiddels om sodanige besoedeling te voorkom;
- (i) noodhulp met betrekking tot beserings wat waarskynlik in masjinerieruimtes kan voorkom en die gebruik van noodhulptoerusting;
- (j) funksies en gebruik van reddingstoestelle;
- (k) lekdiensmetodes, met in die besonder die stappe wat gedoen moet word ingeval van die instroming van seewater in die masjienkamer;
- (l) veilige werkpraktyke.

5. Elke kandidaat moet beskik oor kennis van die internasionale maritieme reg soos beliggaam in internasionale ooreenkomste en konvensies in die mate waarin hulle betrekking het op die uitdruklike verpligtinge en verantwoordelikhede van die ingenieursafdeling, in die besonder dié rakende veiligheid en die beskerming van die mariene omgewing. Die omvang van die kennis van nasionale maritieme wetgewing word aan die oordeel van die Administrasie oorgelaat, maar moet nasionale reëlins insluit vir die toepassing van internasionale ooreenkomste en konvensies.

6. Elke kandidaat moet oor kennis beskik van personeelbestuur, -organisasie en -opleiding aan boord van skeep.

Regulasie III/4

Verpligte minimum vereistes vir diplomering van ingenieur-offisiere in bevel van 'n wag in 'n tradisioneel-bemande masjienkamer of aangewese diens-ingenieur-offisiere in 'n periodiek onbemande masjienkamer

1. Elke ingenieur-offisier in bevel van 'n wag in 'n tradisioneelbemande masjienkamer of die aangewese diens-ingenieur-offisier in 'n periodiek onbemande masjienkamer van 'n skeep aangedryf deur hoofaandrywingsmasjinerie van 750 kW aandrywingskrag of meer, moet oor 'n toepaslike sertifikaat beskik.

2. Elke kandidaat vir diplomering moet—

- (a) minstens 18 jaar oud wees;
- (b) die Administrasie oortuig van sy mediese geskiktheid, insluitende gesig en gehoor;
- (c) beskik oor altesaam minstens drie jaar goedgekeurde onderwys of opleiding wat verband hou met die pligte van 'n marine-ingenieur;
- (d) 'n toereikende tydperk van diens op see voltooi het wat ingesluit kan wees in die tydperk van drie jaar wat in subparagraaf (c) genoem word;

4. Every candidate shall possess adequate practical knowledge, in at least the following subjects:

- (a) Operation and maintenance of—
 - (i) marine diesel engines;
 - (ii) marine steam propulsion plant;
 - (iii) marine gas turbines;
- (b) operation and maintenance of auxiliary machinery systems, including steering gear systems;
- (c) operation, testing and maintenance of electrical and control equipment;
- (d) operation and maintenance of cargo handling equipment and deck machinery;
- (e) detection of machinery malfunction, location of faults and action to prevent damage;
- (f) organization of safe maintenance and repair procedures;
- (g) methods of, and aids for, fire prevention, detection and extinction;
- (h) regulations to be observed regarding pollution of the marine environment and methods and aids to prevent such pollution;
- (i) first aid related to injuries which might be expected in machinery spaces and use of first aid equipment;
- (j) functions and use of life-saving appliances;
- (k) methods of damage control with specific reference to action to be taken in the event of flooding of sea water into the engine room;
- (l) safe working practices.

5. Every candidate shall possess a knowledge of international maritime law as embodied in international agreements and conventions as they affect the specific obligations and responsibilities of the engine department, particularly those concerning safety and the protection of the marine environment. The extent of knowledge of national maritime legislation is left to the discretion of the Administration but shall include national arrangements for implementing international agreements and conventions.

6. Every candidate shall possess a knowledge of personnel management, organization and training aboard ships.

Regulation III/4

Mandatory minimum requirements for certification of engineer officers in charge of a watch in a traditionally manned engine room or designated duty engineer officers in a periodically unmanned engine room.

1. Every engineer officer in charge of a watch in a traditionally manned engine room or the designated duty engineer officer in a periodically unmanned engine room on a sea-going ship powered by main propulsion machinery of 750 kW propulsion power or more shall hold an appropriate certificate.

2. Every candidate for certification shall—

- (a) be not less than 18 years of age;
- (b) satisfy the Administration as to medical fitness, including eyesight and hearing;
- (c) have not less than a total of three years approved education or training, relevant to the duties of a marine engineer;
- (d) have completed an adequate period of sea-going service which may have been included within the period of three years stated in subparagraf (c);

- (e) die Administrasie daarvan oortuig dat hy oor die teoretiese en praktiese kennis van die bediening en onderhoud van marine-masjinerie beskik ooreenkomstig die pligte van 'n ingenieuroffisier;
- (f) 'n goedgekeurde praktiese brandweerkursus bygewoon het;
- (g) kennis dra van veilige werkpraktyke.

Die Administrasie kan die vereiste van subparagrafe (c) en (d) aanpas vir ingenieuroffisiere van skepe aangedryf deur hoofaandrywingsmasjinerie van minder as 3 000 kW aandrywingskrag wat op kusvaarte gebruik word, met inagneming van die uitwerking op die veiligheid van alle skepe wat in dieselfde waters mag vaar.

3. Elke kandidaat moet oor kennis beskik van die werking en onderhoud van hoof- en hulpmasjinerie, wat kennis moet insluit van die betrokke regulatoriese vereistes en ook kennis van ten minste die volgende spesifieke items:

(a) *Waghouroetines:*

- (i) Pligte wat verband hou met die oorneem en aanvaarding van 'n wag;
- (ii) roetinepligte wat tydens 'n wag onderneem word;
- (iii) byhou van die masjinerieruimte-logboek en die betekenis van die lesings wat geneem word;
- (iv) pligte wat met die oorhandiging van 'n wag verband hou.

(b) *Hoof- en hulpmasjinerie:*

- (i) Bystand met die voorbereiding van hoofmasjinerie en voorbereiding van hulpmasjinerie vir werking;
- (ii) werking van stoomketels, insluitende die verbrandingsstelsel;
- (iii) metodes om watervlak in stoomketels na te gaan en nodige optrede indien watervlak abnormaal is;
- (iv) opspoor van algemene foute van masjinerie en aanleg in masjien- en ketelkamers en nodige optrede om skade te voorkom.

(c) *Pompstelsels:*

- (i) Roetinepomperasies;
- (ii) werking van lens-, ballas- en vragpompstelsels.

(d) *Kraginstallasie:*

Vorbereiding, aanskakeling, koppeling en oorskakeling van alternators of generators.

(e) *Veiligheids- en noodprosedures:*

- (i) Veiligheidsvoorsorgmaatreëls wat tydens 'n wag nagekom moet word en onmiddellike stappe wat gedoen moet word ingeval van 'n brand of ongeluk, met besondere aandag aan oliestelsels;
- (ii) veilige isolering van elektriese en ander soorte installasies en toerusting wat nodig is voordat personeel toegelaat word om aan sodanige installasies of toerusting te werk.

(f) *Besoedelingvoorkomingsprosedures:*

Die maatreëls wat nagekom moet word om die besoedeling van die omgewing deur olie, vragreste, rioolvuil, rook of ander besoedelingstowwe te voorkom. Die gebruik van besoedelingvoorkomingstoerusting, insluitende olie/waterafskeiers, sliktensels en rioolwegdoeningsaanleg.

(g) *Noodhulp:*

Basiese noodhulp wat verband hou met beserings wat in masjinerieruimtes verwag kan word.

- (e) satisfy the Administration that he has the theoretical and practical knowledge of the operation and maintenance of marine machinery appropriate to the duties of an engineer officer;
- (f) have attended an approved practical fire-fighting course;
- (g) have knowledge of safe working practices.

The Administration may vary the requirement of subparagraphs (c) and (d) for engineer officers of ships powered by main propulsion machinery of less than 3 000 kW propulsion power engaged on near-coastal voyages, bearing in mind the effect on the safety of all ships which may be operating in the same waters.

3. Every candidate shall have knowledge of the operation and maintenance of main and auxiliary machinery, which shall include knowledge of relevant regulatory requirements and also knowledge of at least the following specific items:

(a) *Watchkeeping routines:*

- (i) Duties associated with taking over and accepting a watch;
- (ii) routine duties undertaken during a watch;
- (iii) maintenance of the machinery space log book and the significance of readings taken;
- (iv) duties associated with handing over a watch.

(b) *Main and auxiliary machinery:*

- (i) Assisting in the preparation of main machinery and preparation of auxiliary machinery for operation;
- (ii) operation of steam boilers, including combustion system;
- (iii) methods of checking water level in steam boilers and action necessary if water level is abnormal;
- (iv) location of common faults of machinery and plant in engine and boiler rooms and action necessary to prevent damage.

(c) *Pumping systems:*

- (i) Routine pumping operations;
- (ii) operation of bilge, ballast and cargo pumping systems.

(d) *Generating plant:*

Preparing, starting, coupling and changing over alternators or generators.

(e) *Safety and emergency procedures:*

- (i) Safety precautions to be observed during a watch and immediate actions to be taken in the event of a fire or accident, with particular reference to oil systems;
- (ii) safe isolation of electrical and other types of plant and equipment required before personnel are permitted to work on such plant and equipment.

(f) *Anti-pollution procedures:*

The precautions to be observed to prevent pollution of the environment by oil, cargo residue, sewage, smoke or other pollutants. The use of pollution prevention equipment, including oily water separators, sludge tank systems and sewage disposal plant.

(g) *First aid:*

Basic first aid related to injuries which might be expected in machinery spaces.

4. Waar stoomketels nie deel van 'n skip se masjinerie uitmaak nie, kan die Administrasie die kennisvereistes van paragrawe 3 (b) (ii) en (iii) weglaat. 'n Sertifikaat wat op sodanige grondslag uitgereik is, is nie geldig vir diens op skepe waarin stoomketels deel van die skip se masjinerie uitmaak nie tot tyd en wyl die ingenieuroffisier tot tevredenheid van die Administrasie bewys lewer van sy bekwaamheid in die uitgelate items. Alle sodanige beperkings moet op die sertifikaat vermeld word.

5. Die opleiding ten einde die nodige teoretiese kennis en praktiese ondervinding op te doen, moet geskied met inagneming van die betrokke internasionale regulasies en aanbevelings.

Regulasie III/5

Verpligte minimum vereistes om die voortgesette bedrewendheid en bywerking van kennis van ingenieuroffisiere te verseker

1. Van elke ingenieuroffisier wat oor 'n sertifikaat beskik en wat op see in diens is of van plan is om terug te keer see toe na 'n tydperk aan wal, moet daar vereis word dat hy, ten einde steeds te kwalifiseer vir diens op see in die rang ooreenkomstig sy sertifikaat, met gereelde tussenpose van hoogstens vyf jaar die Administrasie oortuig aangaande—

- (a) mediese geskiktheid, insluitende gesig en gehoor; en
- (b) professionele bekwaamheid—
 - (i) deur goedgekeurde diens van minstens een jaar as ingenieuroffisier gedurende die voorafgaande vyf jaar; of
 - (ii) op grond daarvan dat hy funksies verrig het wat verband hou met die pligte ooreenkomstig die graad van sertifikaat waarvoor hy beskik wat geag word ten minste gelykwaardig te wees met die diens op see vereis in paragraaf 1 (b) (i); of
 - (iii) deur een van die volgende:
 - Deur in 'n goedgekeurde toets te slaag; of
 - deur 'n goedgekeurde kursus of kursusse met welslae te deurloop; of
 - deurdat hy vir 'n tydperk van minstens drie maande as ingenieuroffisier goedgekeurde diens op see verrig het in 'n botallige hoedanigheid, of in 'n laer rang as dié waarvoor hy die sertifikaat hou onmiddellik voordat hy die rang aanvaar het waarop hy ingevolge sy sertifikaat geregtig is.

2. Die kursus of kursusse genoem in paragraaf 1 (b) (iii) moet in die besonder wysigings insluit in die betrokke internasionale regulasies en aanbevelings rakende die veiligheid van menselewens op see en die beskerming van die mariene omgewing.

3. Die Administrasie moet toesien dat die tekste van onlangse wysigings in internasionale regulasies rakende die veiligheid van menselewens op see en die beskerming van die mariene omgewing aan skepe onder sy jurisdiksie beskikbaar gestel word.

Regulasie III/6

Verpligte minimum vereistes vir matrose wat deel uitmaak van 'n masjienkamerwag

1. Die minimum vereistes vir 'n matroos wat deel uitmaak van 'n masjienkamerwag, is soos in paragraaf 2 uiteengesit word. Die vereistes geld nie vir—

- (a) 'n matroos benoem as die assistent van die ingenieuroffisier in bevel van die wag* nie;

* Hier word verwys na Resolusie 9—“Aanbeveling betreffende minimum vereistes vir 'n matroos aangewys as die assistent van die ingenieuroffisier in bevel van die wag” aangeneem deur die Internasionale Konferensie insake die Opleiding en Diplomerings van Seevaarders, 1978.

4. Where steam boilers do not form part of a ship's machinery, the Administration may omit the knowledge requirements of paragraphs 3 (b) (ii) and (iii). A certificate awarded on such a basis shall not be valid for service on ships in which steam boilers form part of a ship's machinery until the engineer officer proves to be competent in the omitted items to the satisfaction of the Administration. Any such limitations shall be stated in the certificate.

5. The training to achieve the necessary theoretical knowledge and practical experience shall take into account relevant international regulations and recommendations.

Regulation III/5

Mandatory minimum requirements to ensure the continued proficiency and updating of knowledge for engineer officers

1. Every engineer officer holding a certificate who is serving at sea or intends to return to sea after a period ashore shall, in order to continue to qualify for sea-going service in the rank appropriate to his certificate, be required at regular intervals not exceeding five years to satisfy the Administration as to—

- (a) medical fitness, including eyesight and hearing; and
- (b) professional competence—
 - (i) by approved service as an engineer officer of at least one year during the preceding five years; or
 - (ii) by virtue of having performed functions relating to the duties appropriate to the grade of certificate held which is considered to be at least equivalent to the sea-going service required in paragraph 1 (b) (i); or
 - (iii) by one of the following:
 - Passing an approved test; or
 - successfully completing an approved course or courses; or
 - having completed approved sea-going service as an engineer officer for a period of not less than three months in a supernumerary capacity, or in a lower rank than that for which he holds the certificate, immediately prior to taking up the rank to which he is entitled by virtue of his certificate.

2. The course or courses referred to in paragraph 1 (b) (iii) shall include, in particular, changes in the relevant international regulations and recommendations concerning the safety of life at sea and the protection of the marine environment.

3. The Administration shall ensure that the texts of recent changes in international regulations concerning the safety of life at sea and the protection of the marine environment are made available to ships under its jurisdiction.

Regulation III/6

Mandatory minimum requirements for ratings forming part of an engine room watch

1. The minimum requirements for a rating if forming part of an engine room watch shall be as set out in paragraph 2. These requirements are not for—

- (a) a rating nominated as the assistant to the engineer officer in charge of the watch*;

* Reference is made to Resolution 9—“Recommendation on Minimum Requirements for a Rating nominated as the Assistant to the Engineer Officer in Charge of the Watch” adopted by the International Conference on Training and Certification of Seafarers, 1978.

- (b) 'n matroos wat opleiding ondergaan nie;
- (c) 'n matroos wie se pligte tydens die wag van ongeskoolde aard is nie.
2. Elke matroos wat deel van 'n masjienkamerwag uitmaak, moet—
- (a) minstens 16 jaar oud wees;
- (b) die Administrasie oortuig van sy mediese geskiktheid, insluitende gesig en gehoor;
- (c) die Administrasie oortuig van sy—
- (i) ondervinding of opleiding betreffende brandbestryding, basiese noodhulp, persoonlike oorlewingsstegnieke, gesondheidsgevaar en persoonlike veiligheid;
- (ii) vermoë om bevel te begryp en hom verstaanbaar uit te druk in aangeleenthede wat op sy pligte betrekking het;
- (d) die Administrasie oortuig dat hy—
- (i) oor ondervinding aan wal met betrekking tot sy pligte op see beskik, aangevul deur 'n voldoende tydperk van diens op see deur die Administrasie vereis; of
- (ii) spesiale opleiding ondergaan het, hetsy voorseeë opleiding of aan boord van 'n skip, insluitende 'n voldoende tydperk van diens op see deur die Administrasie vereis; of
- (iii) goedgekeurde diens op see agter die rug hê van ten minste ses maande.
3. Elke sodanige matroos moet oor kennis beskik van—
- (a) masjienkamerwagprosedures en die vermoë om 'n wagroetine ooreenkomstig sy pligte uit te voer;
- (b) veilige werkspraktyke in verband met masjienkamerwerkzaamhede;
- (c) die terminologie wat in masjinerieruimtes gebruik word en die name van masjinerie en toerusting wat verband hou met sy pligte;
- (d) basiese omgewingsbeskermingsprosedures.
4. Elke matroos van wie daar verwag word dat hy 'n ketelwag moet hou, moet kennis dra van die veilige bediening van ketels en moet oor die vermoë beskik om die korrekte watervlakke en stoomdruk te handhaaf.
5. Elke matroos wat deel uitmaak van 'n masjienkamerwag moet vertrouwd wees met sy wagdiens in die masjinerieruimtes van die skip waarop hy diens moet doen. Met betrekking tot die skip in die besonder moet die matroos—
- (a) kennis dra van die gebruik van toepaslike interne kommunikasiestelsels;
- (b) kennis dra van die ontsnaproetes uit masjinerieruimtes;
- (c) kennis dra van masjienkameralarmstelsels en oor die vermoë beskik om tussen die verskillende alarms te onderskei, met besondere aandag aan brandblusgasalarms;
- (d) vertrouwd wees met die plasing en gebruik van brandbestrydingsapparaat in die masjinerieruimtes.
6. 'n Seevaarder kan deur die Administrasie geag word aan die vereistes van hierdie Regulasie te voldoen het indien hy vir 'n tydperk van minstens een jaar binne die vyf jaar wat die inwerkingtreding van die Konvensie vir die Administrasie voorafgaan, in 'n toepaslike hoedanigheid in die ingenieursafdeling diens gedoen het.
- (b) a rating who is under training;
- (c) a rating whose duties while on watch are of an unskilled nature.
2. Every rating forming part of an engine room watch shall—
- (a) be not less than 16 years of age;
- (b) satisfy the Administration as to medical fitness, including eyesight and hearing;
- (c) satisfy the Administration as to—
- (i) experience or training regarding fire-fighting, basic first aid, personal survival techniques, health hazards and personal safety;
- (ii) ability to understand orders, and make himself understood in matters relevant to his duties;
- (d) satisfy the Administration that he has—
- (i) shore experience relevant to his sea-going duties supplemented by an adequate period of sea-going service as required by the Administration; or
- (ii) undergone special training either pre-sea or on board ship, including an adequate period of sea-going service as required by the Administration; or
- (iii) approved sea-going service of at least six months.
3. Every such rating shall have knowledge of—
- (a) engine room watchkeeping procedures and the ability to carry out a watch routine appropriate to his duties;
- (b) safe working practices as related to engine room operations;
- (c) terms used in machinery spaces and names of machinery and equipment relative to his duties;
- (d) basic environmental protection procedures.
4. Every rating required to keep a boiler watch shall have knowledge of the safe operation of boilers, and shall have the ability to maintain the correct water levels and steam pressures.
5. Every rating forming part of an engine room watch shall be familiar with his watchkeeping duties in the machinery spaces on the ship on which he is to serve. In particular, with respect to that ship the rating shall have—
- (a) knowledge of the use of appropriate internal communication systems;
- (b) knowledge of escape routes from machinery spaces;
- (c) knowledge of engine room alarm systems and ability to distinguish between the various alarms with special reference to fire extinguishing gas alarms;
- (d) familiarity with the location and use of fire-fighting equipment in the machinery spaces.
6. A seafarer may be considered by the Administration to have met the requirements of this Regulation if he has served in a relevant capacity in the engine department for a period of not less than one year within the last five years preceding the entry into force of the Convention for that Administration.

HOOFSTUK IV RADIO-AFDELING

RADIOWAGHOUDING EN -INSTANDHOUDING

Verduideliking

Verpligte bepalinge betreffende radiowaghouding word uiteengesit in die Radioregulasies, en die bepalinge insake veiligheidsradiowaghouding en -instandhouding word uiteengesit in die Internasionale Konvensie vir die Beveiliging van Menselewe op See en in die Radioregulasies, soos die twee stelle regulasies gewysig mag word en van krag is. Die aandaag word ook gevestig op die betrokke resolusies aangeneem deur die Internasionale Konferensie insake die Opleiding en Diplomerings van Seevaarders, 1978

Regulasie IV/1

Verpligte minimum vereistes vir diplomerings van radio-offisiere

1. Elke radio-offisier in bevel van radiodienste of wat radiopligte op 'n skip uitvoer, moet oor 'n toepaslike sertifikaat of sertifikaat beskik uitgereik of erken deur die Administrasie ingevolge die bepalinge van die Radioregulasies en oor voldoende kwalifiserende diens.

2. Daarbenewens moet 'n radio-offisier—

- (a) minstens 18 jaar oud wees;
- (b) die Administrasie oortuig van sy mediese geskiktheid, veral betreffende gesig, gehoor en spraak;
- (c) voldoen aan die bepalinge van die Byvoegsel van hierdie Regulasie.

3. Van elke kandidaat vir 'n sertifikaat moet daar vereis word dat hy tot tevredenheid van die betrokke Administrasie in 'n eksamen of eksamens slaag.

4. Die kennisvlak vir diplomerings moet voldoende wees sodat die radio-offisier sy radiopligte veilig en doeltreffend kan uitvoer. By die vasstelling van die toepaslike kennisvlak en die opleiding wat nodig is om daardie kennis en praktiese vermoë te bereik, moet die Administrasie rekening hou met die bepalinge van die Radioregulasies en die Byvoegsel van hierdie Regulasie. Administrasies moet ook rekening hou met die toepaslike resolusies aangeneem deur die Internasionale Konferensie insake die Opleiding en Diplomerings van Seevaarders, 1978, en toepaslike IMCO-aanbevelings.

BYVOEGSEL VAN REGULASIE IV/1

Minimum bykomende kennis- en opleidingsvereistes vir radio-offisiere

Benewens te voldoen aan die vereistes vir die uitreiking van 'n sertifikaat ooreenkomstig die Radioregulasies, moet radio-offisiere oor kennis en opleiding, insluitende praktiese opleiding, in die volgende beskik:

- (a) Die verskaffing van radiodienste in noodgevalle, met inbegrip van—
 - (i) verlating van skip;
 - (ii) brand aan boord;
 - (iii) gedeeltelik of algehele onklaarraking van die radiostasie;
- (b) die bediening van reddingsbote, reddings-vlotte, dryftoestelle en hulle toerusting, met besondere aandaag aan draagbare en vaste reddingsbootradio-apparaat en nood-posisie- aanduiding-radiobakens;
- (c) oorlewing ter see;
- (d) noodhulp;
- (e) brandvoorkoming en brandbestryding met besondere aandaag aan die radioinstallasie;

CHAPTER IV

RADIO DEPARTMENT

RADIO WATCHKEEPING AND MAINTENANCE

Explanatory note

Mandatory provisions relating to radio watchkeeping are set forth in the Radio Regulations, and the safety radio watchkeeping and maintenance provisions are set forth in the International Convention for the Safety of Life at Sea and in the Radio Regulations, as these two sets of Regulations may be amended and are in force. Attention is also directed to the relevant resolutions adopted by the International Conference on Training and Certification of Seafarers, 1978

Regulation IV/1

Mandatory minimum requirements for certification of radio officers

1. Every radio officer in charge of, or performing, radio duties in a ship shall hold an appropriate certificate or certificates issued or recognized by the Administration under the provisions of the Radio Regulations, and have adequate qualifying service.

2. In addition, a radio officer shall—

- (a) be not less than 18 years of age;
- (b) satisfy the Administration as to medical fitness, particularly regarding eyesight, hearing and speech;
- (c) meet the requirements of the Appendix to this Regulation.

3. Every candidate for a certificate shall be required to pass an examination or examinations to the satisfaction of the Administration concerned.

4. The level of knowledge required for certification shall be sufficient for the radio officer to carry out his radio duties safely and efficiently. In determining the appropriate level of knowledge and the training necessary to achieve that knowledge and practical ability, the Administration shall take into account the requirements of the Radio Regulations and the Appendix to this Regulation. Administrations shall also take into account the relevant resolutions adopted by the International Conference on Training and Certification of Seafarers, 1978, and relevant IMCO recommendations.

APPENDIX TO REGULATION IV/1

Minimum additional knowledge and training requirements for radio officers

In addition to satisfying the requirements for the issue of a certificate in compliance with the Radio Regulations, radio officers shall have knowledge and training, including practical training, in the following:

- (a) The provision of radio services in emergencies, including—
 - (i) abandon ship;
 - (ii) fire aboard ship;
 - (iii) partial or full breakdown of the radio station;
- (b) the operation of lifeboats, liferafts, buoyant apparatus and their equipment, with special reference to portable and fixed lifeboat radio apparatus and emergency position-indicating radio beacons;
- (c) survival at sea;
- (d) first aid;
- (e) fire prevention and fire-fighting with particular reference to the radio installation;

- (f) voorkomingsmaatreëls vir die veiligheid van die skip en personeel in verband met gevare verbonde aan radioapparaat, insluitende elektriese, stralings-, chemiese en meganiese gevare;
- (g) die gebruik van die IMCO Merchant Ship Search and Rescue Manual (MERSAR), met besondere aandag aan radiokommunikasie;
- (h) skeepsposisie-aanmeldingstelsels en -prosedures;
- (i) die gebruik van die International Code of Signals en die IMCO Standard Marine Navigational Vocabulary;
- (j) radio-mediese stelsels en prosedures.

Regulasie IV/2

Verpligte minimum vereistes om die voortgesette bedrewenheid en bywerking van kennis van radio-offisiere te verseker

1. Van elke radio-offisier wat oor 'n sertifikaat of sertifikaat beskik uitgereik of erken deur die Administrasie, moet daar, ten einde hom steeds vir diens op see te laat kwalifiseer, vereis word dat hy die Administrasie oortuig van die volgende:

- (a) Mediese geskiktheid, veral betreffende gesig, gehoor en spraak, met gereelde tussenpose van hoogstens vyf jaar; en
- (b) professionele bekwaamheid—
 - (i) deur goedgekeurde radiokommunikasiediens as radio-offisier met geen enkele diensonderbreking van langer as vyf jaar nie;
 - (ii) deur ná sodanige onderbreking in 'n goedgekeurde toets te slaag of met welslae 'n goedgekeurde opleidingskursus of -kursusse op see of aan wal te deurloop, wat elemente moet insluit wat direk betrekking het op die veiligheid van menselewens op see en op moderne radiokommunikasietoerusting en wat ook radionavigasietoerusting kan insluit.

2. Wanneer nuwe metodes, toerusting of praktyke ingevoer word aan boord van skepe wat daarop geregtig is om onder sy vlag te vaar, kan die Administrasie vereis dat radio-offisiere in 'n goedgekeurde toets slaag of 'n toepaslike opleidingskursus of -kursusse op see of aan wal met welslae deurloop, met besondere aandag aan veiligheidspligte.

3. Elke radio-offisier moet, ten einde steeds vir diens op see te kwalifiseer aan boord van besondere tipes skepe ten opsigte waarvan daar internasionaal op spesiale opleidingsvereistes besluit is, met welslae goedgekeurde toepaslike opleiding deurloop of eksamens aflê wat rekening hou met die toepaslike internasionale regulasies en aanbevelings.

4. Die Administrasie moet toesien dat die tekste van onlangse wysigings in internasionale regulasies betreffende radiokommunikasie en wat vir die veiligheid van menselewens op see van belang is, vir skepe onder sy jurisdiksie beskikbaar is.

5. Administrasies word aangemoedig om, in oorleg met die betrokke instansies, 'n struktuur van opknappings- en bygewerkte kursusse, of vrywillig of verpligtend, na gelang van die geval, op see of aan wal, te formuleer of die formulering daarvan te bevorder, vir radio-offisiere in diens op see en veral vir seevaarders wat terugkeer seediens toe. Die kursus of kursusse moet elemente insluit wat van direkte belang vir radiopligte is en veranderings insluit in marine-radiokommunikasietegnologie en in toepaslike internasionale regulasies en aanbevelings* betreffende die veiligheid van menselewens op see.

* Insluitende enige IMCO-aanbevelings rakende die ontwikkeling van die maritieme noodstelsel.

- (f) preventive measures for the safety of ship and personnel in connexion with hazards related to radio equipment, including electrical, radiation, chemical and mechanical hazards;
- (g) the use of the IMCO Merchant Ship Search and Rescue Manual (MERSAR) with particular reference to radiocommunications;
- (h) ship position-reporting systems and procedures;
- (i) the use of the International Code of Signals and the IMCO Standard Marine Navigational Vocabulary;
- (j) radio medical systems and procedures.

Regulation IV/2

Mandatory minimum requirements to ensure the continued proficiency and updating of knowledge for radio officers

1. Every radio officer holding a certificate or certificates issued or recognized by the Administration shall, in order to continue to qualify for sea-going service, be required to satisfy the Administration as to the following:

- (a) Medical fitness, particularly regarding eyesight, hearing and speech, at regular intervals not exceeding five years; and
- (b) professional competence—
 - (i) by approved radiocommunications service as a radio officer with no single interruption of service exceeding five years;
 - (ii) following such interruption, by passing an approved test or successfully completing an approved training course or courses at sea or ashore, which shall include elements that are of direct relevance to the safety of life at sea and modern radiocommunication equipment and may also include radionavigation equipment.

2. When new modes, equipment or practices are being introduced aboard ships entitled to fly its flag, the Administration may require radio officers to pass an approved test or successfully complete an appropriate training course or courses, at sea or ashore, with particular reference to safety duties.

3. Every radio officer shall, to continue to qualify for sea-going service on board particular types of ships for which special training requirements have been internationally agreed upon, successfully complete approved relevant training or examinations which shall take into account relevant international regulations and recommendations.

4. The Administration shall ensure that the texts of recent changes in international regulations relating to radiocommunications and relevant to the safety of life at sea, are available to ships under its jurisdiction.

5. Administrations are encouraged, in consultation with those concerned, to formulate or promote the formulation of a structure of refresher and updating courses, either voluntary or mandatory, as appropriate, at sea or ashore, for radio officers who are serving at sea and especially for re-entrants to sea-going service. The course or courses shall include elements that are of direct relevance to radio duties and include changes in marine radiocommunication technology and relevant international regulations and recommendations* concerning the safety of life at sea.

* Including any IMCO recommendations concerning the development of the maritime distress system.

Regulasie IV/3*Verpligte minimum vereistes vir die diplomering van radiotelefoniste*

1. Elke radiotelefonis in bevel van radiodienste of wat radiopligte op 'n skip uitvoer, moet beskik oor 'n toepaslike sertifikaat of sertifikate uitgereik of erken deur die Administrasie ingevolge die bepalings van die Radioregulasies.

2. Daarbenewens moet sodanige radiotelefonis van 'n skip, wat 'n radiotelefoonstasie moet hê ingevolge die Internasionale Konvensie vir die Beveiliging van Menselewens op See—

- (a) minstens 18 jaar oud wees;
- (b) die Administrasie oortuig van sy mediese geskiktheid, veral betreffende gesig, gehoor en spraak;
- (c) voldoen aan die vereistes van die Byvoegsel van hierdie Regulasie.

3. Van elke kandidaat vir 'n sertifikaat moet daar vereis word dat hy tot tevredenheid van die die betrokke Administrasie in 'n eksamen of eksamens slaag.

4. Die vereiste kennisvlak vir diplomering moet voldoende wees sodat die radiotelefonis sy radiopligte veilig en doeltreffend kan uitvoer. By die vasstelling van die toepaslike kennisvlak en die opleiding wat nodig is om daardie kennis en praktiese vermoë te bereik, moet die Administrasie rekening hou met die vereistes van die Radioregulasies en die Byvoegsel van hierdie Regulasie. Administrasies moet ook rekening hou met die toepaslike resolusies aangenem deur die Internasionale Konferensie insake die Opleiding en Diplomering van Seevaarders, 1978, en toepaslike IMCO-aanbevelings.

BYVOEGSEL VAN REGULASIE IV/3**Minimum bykomende kennis- en opleidingsvereistes vir radiotelefoniste**

Benewens te voldoen aan die vereistes vir die uitreiking van 'n sertifikaat ooreenkomstig die Radioregulasies, moet radiotelefoniste beskik oor kennis en opleiding, insluitende praktiese opleiding, in die volgende:

- (a) Die verskaffing van radiodienste in noodgevallen, met inbegrip van—
 - (i) verlating van die skip;
 - (ii) brand aan boord;
 - (iii) gedeeltelike of algehele onklaarraking van die radiostasie;
- (b) die bediening van reddingsbote, reddingsvlotte, dryftoestelle en hulle toerusting, met besondere aandag aan draagbare en vaste reddingsbootradio-apparaat en nood-posisieaanduiding-radiobakens;
- (c) oorlewing ter see;
- (d) noodhulp;
- (e) brandvoorkoming en brandbestryding, met besondere aandag aan die radioinstallasie;
- (f) voorkomingsmaatreëls vir die veiligheid van die skip en personeel in verband met gevare verbonde aan radiotoerusting, met inbegrip van elektriese, stralings-, chemiese en meganiese gevare;
- (g) die gebruik van die IMCO Merchant Ship Search and Rescue Manual (MERSAR), met besondere aandag aan radiokommunikasie;
- (h) skeepsposisie-aanmeldingstelsels en -prosedures;
- (i) die gebruik van die International code of Signals en die IMCO Standard Marine Navigational Vocabulary;
- (j) radio-mediese stelsels en prosedures.

Regulation IV/3*Mandatory minimum requirements for certification of radiotelephone operators*

1. Every radiotelephone operator in charge of, or performing, radio duties in a ship shall hold an appropriate certificate or certificates issued or recognized by the Administration under the provisions of the Radio Regulations.

2. In addition, such radiotelephone operator of a ship which is required to have a radiotelephone station by the International Convention for the Safety of Life at Sea, shall—

- (a) be not less than 18 years of age;
- (b) satisfy the Administration as to medical fitness, particularly regarding eyesight, hearing and speech;
- (c) meet the requirements of the Appendix to this Regulation.

3. Every candidate for a certificate shall be required to pass an examination or examinations to the satisfaction of the Administration concerned.

4. The level of knowledge required for certification shall be sufficient for the radiotelephone operator to carry out his radio duties safely and efficiently. In determining the appropriate level of knowledge and the training necessary to achieve that knowledge and practical ability, the Administration shall take into account the requirements of the Radio Regulations and the Appendix to this Regulation. Administrations shall also take into account the relevant resolutions adopted by the International Conference on Training and Certification of Seafarers, 1978, and relevant IMCO recommendations.

APPENDIX TO REGULATION IV/3**Minimum additional knowledge and training requirements for radiotelephone operators**

In addition to satisfying the requirements for the issue of a certificate in compliance with the Radio Regulations, radiotelephone operators shall have knowledge and training, including practical training, in the following:

- (a) The provision of radio services in emergencies, including—
 - (i) abandon ship;
 - (ii) fire aboard ship;
 - (iii) partial or full breakdown of the radio station;
- (b) the operation of lifeboats, liferafts, buoyant apparatus and their equipment, with special reference to portable and fixed lifeboat radio apparatus and emergency position-indicating radio beacons;
- (c) survival at sea;
- (d) first aid;
- (e) fire prevention and fire-fighting with particular reference to the radio installation;
- (f) preventive measures for the safety of ship and personnel in connexion with hazards related to radio equipment, including electrical, radiation, chemical and mechanical hazards;
- (g) the use of the IMCO Merchant Ship Search and Rescue Manual (MERSAR) with particular reference to radiocommunications;
- (h) ship position-reporting systems and procedures;
- (i) the use of the International Code of Signals and the IMCO Standard Marine Navigational Vocabulary;
- (j) radio medical systems and procedures.

HOOFSTUK V**SPEZIALE VEREISTES VIR TENKSKEPE****Regulasie V/1**

Verpligte minimum vereistes vir die opleiding en kwalifikasies van gesagvoerders, offisiere en matrose van olietenskepe

1. Offisiere en matrose wat bepaalde pligte en verantwoordelikhede sal hê wat met sodanige pligte gepaard gaan in verband met vrag en vragtoerusting op olietenskepe en wat nie aan boord van 'n olietenskip diens gedoen het as deel van die gereelde bemanning nie, moet, reeds voordat hulle sodanige pligte uitvoer, 'n toepaslike brandweerkursus aan wal voltooi het; sowel as—

- (a) 'n goedgekeurde dienstdyperk onder toesig aan boord van 'n skip ten einde voldoende kennis van veilige bedryfspraktyke te verkry; of
- (b) 'n goedgekeurde vertrouwmakingskursus met betrekking tot olietenskepe wat basiese voorkomingsmaatreëls en -prosedures ten opsigte van veiligheid en besoedeling, uitlegplanne van verskillende soorte olietenskepe, soorte vrag, hulle gevare en hanterings-toerusting, algemene operasionele volgorde en olietenskipterminologie, insluit.

2. Gesagvoerders, hoofingenieuroffisiere, eerste stuurmanne, tweede ingenieuroffisiere en enige persoon buiten voorgenoemdes met die onmiddellike verantwoordelikheid vir die inskeping, ontskeping en toesig onderweg of hantering van vrag, moet, benewens die bepalinge in paragraaf 1—

- (a) oor geskikte toepaslike ondervinding beskik vir hulle pligte op olietenskepe; en
- (b) moet 'n gespesialiseerde opleidingsprogram voltooi het wat op hulle pligte van toepassing is, met inbegrip van olietenskipveiligheid, brandbeveiligingsmaatreëls en -stelsels, voorkoming en beheer van besoedeling, bedryfspraktyke en verpligtinge ingevolge geldende wette en regulasies.

3. Binne twee jaar nadat die Konvensie vir 'n Party in werking tree, kan 'n seevaarder geag word aan al die vereistes van paragraaf 2 (b) te voldoen het indien hy vir 'n tydperk van minstens een jaar binne die voorafgaande vyf jaar in 'n toepaslike hoedanigheid aan boord van olietenskepe diens gedoen het.

Regulasie V/2

Verpligte minimum vereistes vir die opleiding en kwalifikasies van gesagvoerders, offisiere en matrose van chemiese tenkskepe

1. Offisiere en matrose wat bepaalde pligte en verantwoordelikhede sal hê wat met sodanige pligte gepaard gaan in verband met vrag en vragtoerusting op chemiese tenkskepe en wat nie aan boord van 'n chemiese tenkskip diens gedoen het as deel van sy gereelde bemanning nie, moet, reeds voordat hulle sodanige pligte uitvoer, 'n toepaslike brandweerkursus aan wal voltooi het; sowel as—

- (a) 'n toepaslike dienstdyperk onder toesig aan boord van 'n skip ten einde voldoende kennis van veilige bedryfspraktyke te verkry; of
- (b) 'n goedgekeurde vertrouwmakingskursus met betrekking tot chemiese tenkskepe wat basiese voorkomingsmaatreëls en -prosedures ten opsigte van veiligheid en besoedeling, uitlegplanne van verskillende soorte chemiese tenkskepe, soorte vrag, hulle gevare en hanterings-toerusting, algemene operasionele volgorde en chemiese tenkskipterminologie, insluit.

CHAPTER V**SPECIAL REQUIREMENTS FOR TANKERS****Regulation V/1**

Mandatory minimum requirements for the training and qualifications of masters, officers and ratings of oil tankers

1. Officers and ratings who are to have specific duties, and responsibilities related to those duties, in connexion with cargo and cargo equipment on oil tankers and who have not served on board an oil tanker as part of the regular complement, before carrying out such duties shall have completed an appropriate shore-based fire-fighting course; and

- (a) an appropriate period of supervised shipboard service in order to acquire adequate knowledge of safe operational practices; or
- (b) an approved oil tanker familiarization course which includes basic safety and pollution prevention precautions and procedures, layouts of different types of oil tankers, types of cargo, their hazards and their handling equipment, general operational sequence and oil tanker terminology.

2. Masters, chief engineer officers, chief mates, second engineer officers and, if other than the foregoing, any person with the immediate responsibility for loading, discharging and care in transit or handling of cargo, in addition to the provisions of paragraph 1, shall have—

- (a) relevant experience appropriate to their duties on oil tankers; and
- (b) completed a specialized training programme appropriate to their duties, including oil tanker safety, fire safety measures and systems, pollution prevention and control, operational practice and obligations under applicable laws and regulations.

3. Within two years after the entry into force of the Convention for a Party, a seafarer may be considered to have met the requirements of paragraph 2 (b) if he has served in a relevant capacity on board oil tankers for a period of not less than one year within the preceding five years.

Regulation V/2

Mandatory minimum requirements for the training and qualifications of masters, officers and ratings of chemical tankers

1. Officers and ratings who are to have specific duties, and responsibilities related to those duties, in connexion with cargo and cargo equipment on chemical tankers and who have not served on board a chemical tanker as part of the regular complement, before carrying out such duties shall have completed an appropriate shore-based fire-fighting course; and

- (a) an appropriate period of supervised shipboard service in order to acquire adequate knowledge of safe operational practices; or
- (b) an approved chemical tanker familiarization course which includes basic safety and pollution prevention precautions and procedures, layouts of different types of chemical tankers, types of cargo, their hazards and their handling equipment, general operational sequence and chemical tanker terminology.

2. Gesagvoerders, hoofingenieur-offisiere, eerste stuurmanne, tweede ingenieur-offisiere en enige persoon buiten voorgenoemdes met onmiddellike verantwoordelikheid vir die inskeping, ontskeping en versorging onderweg of hantering van vrag, moet, benewens die bepalings van paragraaf 1—

- (a) oor geskikte toepaslike ondervinding beskik vir hulle pligte op chemiese tenkskepe; en
- (b) 'n gespesialiseerde opleidingsprogram voltooi het wat op hulle pligte van toepassing is, met inbegrip van chemiese tenkskipveiligheid, brandbeveiligingsmaatreëls en -stelsels, voorkoming en beheer van besoedeling, bedryfspraktyke en verpligtinge ingevolge toepaslike wette en regulasies.

3. Binne twee jaar nadat die Konvensie vir 'n Party in werking tree, kan 'n seevaarder geag word aan die vereistes van paragraaf 2 (b) te voldoen het indien hy vir 'n tydperk van minstens een jaar binne die voorafgaande vyf jaar in 'n toepaslike hoedanigheid aan boord van chemiese tenkskepe diens gedoen het.

Regulasie V/3

Verpligte minimum vereistes vir die opleiding en kwalifikasies van gesagvoerders, offisiere en matrose van vloeigastenskepe

1. Offisiere en matrose wat bepaalde pligte en verantwoordelikhede sal hê wat met sodanige pligte gepaard gaan in verband met vrag en vragtoerusting op vloeigastenskepe en wat nie aan boord van 'n vloeigastenskip diens gedoen het as deel van sy gereelde bemanning nie, moet, reeds voordat hulle sodanige pligte uitvoer, 'n paslike brandweerkursus aan wal voltooi het; sowel as—

- (a) 'n toepaslike tydperk van diens onder toesig aan boord van 'n skip ten einde voldoende kennis van veilige bedryfspraktyke te verkry; of
- (b) 'n goedgekeurde vertrouwdmakingskursus met betrekking tot vloeigastenskepe wat basiese voorkomingsmaatreëls en -prosedures ten opsigte van veiligheid en besoedeling, uitlegplanne van verskillende soorte vloeigastenskepe, soorte vrag, hulle gevare en hanteringstoerusting, algemene operasionele volgorde en vloeigastenskipterminologie, insluit.

2. Gesagvoerders, hoofingenieur-offisiere, eerste stuurmanne, tweede ingenieur-offisiere en enige persoon buiten voorgenoemdes met die onmiddellike verantwoordelikheid vir die inskeping, ontskeping en versorging onderweg of hantering van vrag, moet benewens die bepalings van paragraaf 1—

- (a) oor geskikte toepaslike ondervinding beskik vir hulle pligte op vloeigastenskepe; en
- (b) 'n gespesialiseerde opleidingsprogram voltooi het wat op hulle pligte betrekking het, met inbegrip van vloeigastenskipveiligheid, brandbeveiligingsmaatreëls en -stelsels, voorkoming en beheer van besoedeling, bedryfspraktyke en verpligtinge ingevolge toepaslike wette en regulasies.

3. Binne twee jaar nadat die Konvensie vir 'n Party in werking tree, kan 'n seevaarder geag word aan die vereistes van paragraaf 2 (b) te voldoen het indien hy vir 'n tydperk van minstens een jaar binne die voorafgaande vyf jaar in 'n toepaslike hoedanigheid aan boord van vloeigastenskepe diens gedoen het.

2. Masters, chief engineer officers, chief mates, second engineer officers and, if other than the foregoing, any person with the immediate responsibility for loading, discharging and care in transit or handling of cargo, in addition to the provisions of paragraph 1, shall have—

- (a) relevant experience appropriate to their duties on chemical tankers; and
- (b) completed a specialized training programme appropriate to their duties including chemical tanker safety, fire safety measures and systems, pollution prevention and control, operational practice and obligations under applicable laws and regulations.

3. Within two years after the entry into force of the Convention for a Party, a seafarer may be considered to have met the requirements of paragraph 2 (b) if he has served in a relevant capacity on board chemical tankers for a period not less than one year within the preceding five years.

Regulation V/3

Mandatory minimum requirements for the training and qualifications of masters, officers and ratings of liquefied gas tankers

1. Officers and ratings who are to have specific duties, and responsibilities related to those duties, in connexion with cargo and cargo equipment on liquefied gas tankers and who have not served on board a liquefied gas tanker as part of the regular complement, before carrying out such duties shall have completed an appropriate shore-based fire-fighting course; and

- (a) an appropriate period of supervised shipboard service in order to acquire adequate knowledge of safe operational practices; or
- (b) an approved liquefied gas tanker familiarization course which includes basic safety and pollution prevention precautions and procedures, layouts of different types of liquefied gas tankers, types of cargo, their hazards and their handling equipment, general operational sequence and liquefied gas tanker terminology.

2. Masters, chief engineer officers, chief mates, second engineer officers and, if other than the foregoing, any person with the immediate responsibility for loading, discharging and care in transit or handling of cargo, in addition to the provisions of paragraph 1, shall have—

- (a) relevant experience appropriate to their duties on liquefied gas tankers; and
- (b) completed a specialized training programme appropriate to their duties including liquefied gas tanker safety, fire safety measures and systems, pollution prevention and control, operational practice and obligations under applicable laws and regulations.

3. Within two years after the entry into force of the convention for a Party, a seafarer may be considered to have met the requirements of paragraph 2 (b) if he has served in a relevant capacity on board liquefied gas tankers for a period of not less than one year within the preceding five years.

HOOFSTUK VI**BEDREWENHEID MET OORLEWINGSVAARTUIE****Regulasie VI/1**

*Verpligte minimum vereistes vir die uitreiking van bedre-
wenheidssertifikate met betrekking tot oorlewingsvaartuie*

Elke seevaarder aan wie 'n bedrewenheidssertifikate met betrekking tot oorlewingsvaartuie uitgereik moet word, moet:

- (a) Minstens 17½ jaar oud wees;
- (b) die Administrasie oortuig van sy mediese geskiktheid;
- (c) goedgekeurde diens op see van minstens 12 maande agter die rug hê of moes 'n goedgekeurde opleidingskursus bygewoon het en goedgekeurde diens op see van minstens nege maande agter die rug hê;
- (d) die Administrasie by wyse van 'n eksamen of by wyse van deurlopende evaluering gedurende 'n goedgekeurde opleidingskursus daarvan oortuig dat hy oor kennis beskik van die inhoud van die Byvoegsel van hierdie Regulasie;
- (e) tot tevredenheid van die Administrasie by wyse van 'n eksamen of by wyse van deurlopende evaluering gedurende 'n goedgekeurde opleidingskursus bewys daarvan lewer dat hy oor die vermoë beskik om—
 - (i) 'n reddingsbaadjie korrek aan te trek; veilig van 'n hoogste af in die water te spring; uit die water aan boord van 'n reddingsvaartuig te klim terwyl hy 'n reddingsbaadjie dra;
 - (ii) 'n onderstebo reddingsvlot regop te draai terwyl hy 'n reddingsbaadjie dra;
 - (iii) die merktekens op oorlewingsvaartuie reg te vertolk met betrekking tot die getal persone wat op hulle toegelaat word;
 - (iv) die korrekte bevels uit te reik wat nodig is vir die tewaterlating en aanboordgaan van die oorlewingsvaartuig, vir die ontruiming van die skip en vir die hantering van die oorlewingsvaartuig en om daaruit aan wal te gaan;
 - (v) oorlewingsvaartuie voor te berei en veilig te water te laat en vinnig van die skip se kant af weg te kom;
 - (vi) beseerdes tydens en na skeepsverlating te hanteer;
 - (vii) te roei en te stuur, 'n mas op te rig, die seile te span, 'n boot onder seil te hanteer en 'n boot volgens kompas te stuur;
 - (viii) seinapparaat, insluitende vuurwerk, te gebruik;
 - (ix) draagbare radio-apparaat vir oorlewingsvaartuie te gebruik.

BYVOEGSEL VAN REGULASIE VI/1

Minimum kennis vereis vir die uitreiking van bedrewenheidssertifikate met betrekking tot oorlewingsvaartuie

1. Tipes noodsituasies wat mag voorkom, soos botsings, brand, sinking.
2. Beginsels van oorlewing, met inbegrip van—
 - (a) waarde van opleiding en dril oefeninge;
 - (b) noodsaaklikheid daarvan om vir enige noodgeval gereed te wees;
 - (c) stappe wat gedoen moet word wanneer seevaarders na oorlewingsvaartuigstasies opgeroep word;

CHAPTER VI**PROFICIENCY IN SURVIVAL CRAFT****Regulation VI/1**

*Mandatory minimum requirements for the issue of
certificates of proficiency in survival craft*

Every seafarer to be issued with a certificate of proficiency in survival craft shall—

- (a) be not less than 17½ years of age;
- (b) satisfy the Administration as to medical fitness;
- (c) have approved sea-going service of not less than 12 months or have attended an approved training course and have approved sea-going service of not less than nine months;
- (d) satisfy the Administration by examination or by continuous assessment during an approved training course that he possesses knowledge of the contents of the Appendix to this Regulation;
- (e) demonstrate to the satisfaction of the Administration by examination or by continuous assessment during an approved training course that he possesses the ability to—
 - (i) don a life-jacket correctly; safely jump from a height into the water; board a survival craft from the water while wearing a life-jacket;
 - (ii) right an inverted liferaft while wearing a life-jacket;
 - (iii) interpret the markings on survival craft with respect to the number of persons they are permitted to carry;
 - (iv) make the correct commands required for launching and boarding the survival craft, clearing the ship and handling and disembarking from the survival craft;
 - (v) prepare and launch survival craft safely into the water and clear the ship's side quickly;
 - (vi) deal with injured persons both during and after abandonment;
 - (vii) row and steer, erect a mast, set the sails, manage a boat under sail and steer a boat by compass;
 - (viii) use signalling equipment, including pyrotechnics;
 - (ix) use portable radio equipment for survival craft.

APPENDIX TO REGULATION VI/1

Minimum knowledge required for the issue of certificates of proficiency in survival craft

1. Types of emergency situations which may occur, such as collisions, fire, foundering.
2. Principles of survival including—
 - (a) value of training and drills;
 - (b) need to be ready for any emergency;
 - (c) actions to be taken when called to survival craft stations;

- (d) stappe wat gedoen moet word wanneer die skip verlaat moet word;
 - (e) stappe wat 'n seevaarder moet doen wanneer hy in die water is;
 - (f) stappe wat aan boord van 'n oorlewingsvaartuig gedoen moet word;
 - (g) vernaamste gevare vir oorlewendes.
3. Spesiale pligte wat aan elke bemanningslid opgedra is soos aangedui in die aantreelys, met inbegrip van die verskille tussen die seine waarmee alle bemanning opgeroep word na oorlewingsvaartuig- en na brandweerstasies.
 4. Soorte reddingstoestelle wat normaalweg aan boord van skepe gehou word.
 5. Konstruksie en uitrusting van oorlewingsvaartuie en individuele items in hulle toerusting.
 6. Besondere kenmerke en geriewe van oorlewingsvaartuie.
 7. Verskeie tipes toestelle wat gebruik word vir die te-waterlating van oorlewingsvaartuie.
 8. Metodes om oorlewingsvaartuie in onstuimige see te water te laat.
 9. Stappe wat gedoen moet word na verlatting van die skip.
 10. Hantering van oorlewingsvaartuie in stormagtige weer.
 11. Gebruik van vanglyn, see-anker en alle ander toerusting.
 12. Toedeling van voedsel en water in oorlewingsvaartuie.
 13. Metodes van helikopterredding.
 14. Gebruik van noodhulptoerusting en bybringtegnieke.
 15. Radiotoestelle wat aan boord van oorlewingsvaartuie gehou word, insluitende nood-posisieaanduiding-radio-bakens.
 16. Uitwerking van hipotermie en die voorkoming daarvan; gebruik van beskermende bedekkings en beskermende kledingstukke.
 17. Metodes om 'n oorlewingsvaartuigenjin aan die gang te sit en te bedien, en sy bybehore tesame met die gebruik van die brandblusser wat verskaf word.
 18. Gebruik van noodbote en motorreddingsbote vir die opstelling van reddingsvlotte en redding van oorlewendes en persone in die see.
 19. Die op-die-strand-stuur van 'n oorlewingsvaartuig.

- (d) actions to be taken when required to abandon ship;
 - (e) actions to be taken when in the water;
 - (f) actions to be taken when aboard a survival craft;
 - (g) main dangers to survivors.
3. Special duties assigned to each crew member as indicated in the muster list, including the differences between the signals calling all crew to survival craft and to fire stations.
 4. Types of life-saving appliances normally carried on board ships.
 5. Construction and outfit of survival craft and individual items of their equipment.
 6. Particular characteristics and facilities of survival craft.
 7. Various types of devices used for launching survival craft.
 8. Methods of launching survival craft into a rough sea.
 9. Action to be taken after leaving the ship.
 10. Handling survival craft in rough weather.
 11. Use of painter, sea anchor and all other equipment.
 12. Apportionment of food and water in survival craft.
 13. Methods of helicopter rescue.
 14. Use of the first aid kit and resuscitation techniques.
 15. Radio devices carried in survival craft, including emergency position-indicating radio beacons.
 16. Effects of hypothermia and its prevention; use of protective covers and protective garments.
 17. Methods of starting and operating a survival craft engine and its accessories together with the use of the extinguisher provided.
 18. Use of emergency boats and motor lifeboats for marshalling liferafts and rescue of survivors and persons in the sea.
 19. Beaching a survival craft.

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