Ο περί της Διεθνούς Συμβάσεως περί Προτύπων Εκπαιδεύσεως, Εκδόσεως Πιστοποιητικών και Τηρήσεως Φυλακών των Ναυτικών, 1978 (Κυρωτικός) και περί Συναφών Θεμάτων (Τροποποιητικός) Νόμος του 2012 εκδίδεται με δημοσίευση στην Επίσημη Εφημερίδα της Κυπριακής Δημοκρατίας σύμφωνα με το Άρθρο 52 του Συντάγματος.

Αριθμός 12(ΙΙΙ) του 2012

# ΤΉΕΡΙΙΤΗΣ ΔΙΕΘΝΟΥΣ ΣΥΜΒΑΣΕΩΣ ΠΕΡΙ ΠΡΟΤΥΠΩΝ ΕΚΠΑΙΔΕΥΣΕΩΣ, ΕΚΙΔΙΘΕΏΣ ΠΙΣΤΟΠΟΙΗΤΙΚΩΝ ΚΑΙ ΤΗΡΗΣΕΩΣ ΦΥΛΑΚΩΝ ΤΩΝ ΝΑΥΤΙΚΩΝ 1978 (ΚΥΡΩΥΚΟΣ) ΚΑΙ ΠΕΡΙ ΣΥΝΑΦΩΝ ΘΕΜΑΤΩΝ (ΤΡΟΠΟΠΟΙΗΤΙΚΟΣ) ΝΟΜΟΣ ΤΟΥ 2012.

Η Βουλή των Αντιπροσώπων ψηφίζει ως ακολούθως:

Συνοπτικός τίτλος. 1. Ο παρών Νόμος θα αναφέρεται ως ο περί της Διεθνούς Συμβάσεως περί Προτύπων Εκπαιδεύσεως, Εκδόσεως Πιστοποιητικών και Τηρήσεως Φυλακών των Ναυτικών, 1978 (Κυρωτικός) και περί Συναφών Θεμάτων (Τροποποιητικός) Νόμος

8 тои 1985 1(III) тои 1998. (Κυρωτικός) και περί Συναφών Θεμάτων (Τροποποιητικός) Νόμος του 2012 και θα διαβάζεται μαζί με τους περί της Διεθνούς Συμβάσεως περί Προτύπων Εκπαιδεύσεως, Εκδόσεως Πιστοποιητικών και Τηρήσεως Φυλακών των Ναυτικών, 1978 (Κυρωτικούς) και περί Συναφών Θεμάτων Νόμους του 1985 και 1998 (που στο εξής θα αναφέρονται ως «ο βασικός νόμος») και ο βασικός νόμος και ο παρών Νόμος θα αναφέρονται μαζί ως οι περί της Διεθνούς Συμβάσεως περί Προτύπων Εκπαιδεύσεως, Εκδόσεως Πιστοποιητικών και Τηρήσεως Φυλακών των Ναυτικών, 1978 (Κυρωτικοί) και περί Συναφών Θεμάτων Νόμοι του 1985 έως 2012.

Τροποποίηση του άρθρου 2 του βασικού νόμου.

- 2. Το άρθρο 2 του βασικού νόμου τροποποιείται ως ακολούθως:
  - (α) Με την αντικατάσταση του ορισμού του όρου «Αποφάσεις» με τον ακόλουθο νέο ορισμό:

«'Αποφάσεις' σημαίνει τις Αποφάσεις 1 και 2 που λήφθηκαν την 25<sup>η</sup> Ιουνίου 2010 στη Μανίλα των Φιλιππινών από τη Διάσκεψη των Μερών της Διεθνούς Συμβάσεως περί Προτύπων Εκπαιδεύσεως, Εκδόσεως Πιστοποιητικών και Τηρήσεως Φυλακών των Ναυτικών, 1978 και κατά τις

διατάξεις του άρθρου XII(1)(a)(ix) της Σύμβασης και οι οποίες τίθενται σε ισχύ την  $1^n$  Ιανουαρίου  $2012 \cdot x$  και

(β) με την προσθήκη, στην κατάλληλη αλφαβητική σειρά, των ακόλουθων νέων όρων και των ορισμών τους:

«'Απόφαση 1' σημαίνει την Απόφαση που λήφθηκε στη Μανίλα και υιοθετεί τις τροποποιήσεις του Παραρτήματος της Σύμβασης·

'Απόφαση 2' σημαίνει την Απόφαση που λήφθηκε στη Μανίλα και υιοθετεί τις τροποποιήσεις του Κώδικα της Σύμβασης·».

Προσθήκη νέου 3. Ο βασικός νόμος τροποποιείται με την προσθήκη, αμέσως μετά άρθρου στο το άρθρο 3 αυτού, του ακόλουθου νέου άρθρου 3Α: βασικό νόμο.

Με τον περί της Διεθνούς Συμβάσεως 3A-(1) «Κύρωση Εκπαιδεύσεως, Εκδόσεως περί Προτύπων Αποφάσεων. Πιστοποιητικών και Τηρήσεως Φυλακών των 12(III) tou 2012. Ναυτικών, 1978 (Κυρωτικό) και περί Συναφών 2012 TOU Νόμο (Τροποποιητικό) Θεμάτων κυρώνονται οι Αποφάσεις.

Πίνακας. Τρίτο Μέρος. Τέταρτο Μέρος. (2) Τα κείμενα των Αποφάσεων εκτίθενται σε πρωτότυπο στα αγγλικά στο Τρίτο Μέρος του Πίνακα και σε μετάφραση στα ελληνικά στο Τέταρτο Μέρος του Πίνακα:

Νοείται ότι σε περίπτωση αντίθετης μεταξύ των δύο κειμένων υπερισχύει το κείμενο που εκτίθεται στο Τρίτο Μέρος του Πίνακα.».

Τροποποίηση του άρθρου 8 του βασικού νόμου.

4. Το άρθρο 8 του βασικού νόμου τροποποιείται με την αντικατάσταση σ' αυτό της φράσης «δια χρηματικής ποινής μέχρι πέντε χιλιάδων λιρών» (δεύτερη γραμμή) με τη φράση «με χρηματική ποινή μέχρι οχτώ χιλιάδες πεντακόσια ευρώ (€8500)».

Τροποποίηση του άρθρου 10 του βασικού νόμου.

5. Το εδάφιο (1) του άρθρου 10 του βασικού νόμου τροποποιείται με την αντικατάσταση σ' αυτό της φράσης «με χρηματική ποινή από εκατό μέχρι πέντε χιλιάδες λίρες» (τέταρτη και πέμπτη γραμμή) με τη φράση «με χρηματική ποινή από διακόσια ευρώ (€200) μέχρι οχτώ χιλιάδες πεντακόσια ευρώ (€8500)».

Τροποποίηση του άρθρου 13 του βασικού νόμου.

6.-(1) Το εδάφιο (2) του άρθρου 13 του βασικού νόμου τροποποιείται ως ακολούθως:

- (α) Με την αντικατάσταση, στην παράγραφο (β) αυτού, της φράσης «κατά τις διατάξεις των παραγράφων 1 έως 3» (δέκατη γραμμή), με τη φράση «κατά τις διατάξεις των παραγράφων 1 έως 4».
- (β) με την αντικατάσταση, στην παράγραφο (δ) αυτού, της φράσης «κατά τις διατάξεις των παραγράφων 1 έως 3 (δεύτερη γραμμή) με τη φράση «κατά τις διατάξεις των παραγράφων 1 έως 7».
- (γ) με την αντικατάσταση, στην παράγραφο (ε) αυτού, της φράσης, «κατά τις διατάξεις της παραγράφου 4 του Κανονισμού Ι/9» (δέκατη και ενδέκατη γραμμή) με τη φράση «κατά τις διατάξεις των παραγράφων 14 έως 16 του Κανονισμού Ι/2».

- (δ) με την αντικατάσταση, στην παράγραφο (θ) αυτού, της φράσης «κατά τις διατάξεις των Κανονισμών ΙΙ/1 έως ΙΙ/4 και ΙΙΙ/1 έως ΙΙΙ/4 του Παραρτήματος» (τρίτη και τέταρτη γραμμή) με τη φράση «κατά τις διατάξεις των Κανονισμών ΙΙ/1 έως ΙΙ/5 και ΙΙΙ/1 έως ΙΙΙ/7 του Παραρτήματος» και
- (ε) με την αντικατάσταση της παραγράφου (ια) αυτού με την ακόλουθη νέα παράγραφο (ια):
  - «(ια) περί των προϋποθέσεων, των όρων και της διαδικασίας προς έκδοση πιστοποιητικού ικανότητας χειριστού σωστικών μέσων, μέσων πυρόσβεσης, παροχής πρώτων βοηθειών, αξιωματικού προστασίας του πλοίου και εκπαίδευσης σχετικής με την προστασία του πλοίου και οδηγίες για όλους τους ναυτικούς, κατά τις διατάξεις των Κανονισμών VI/2, VI/3, VI/4, VI/5 και VI/6 του Παραρτήματος·».
- (2) Το εδάφιο (3) του άρθρου 13 του βασικού νόμου, τροποποιείται με την αντικατάσταση σ' αυτό της φράσης «μέχρι πέντε χιλιάδες λίρες» (τρίτη γραμμή) με την φράση «μέχρι οχτώ χιλιάδες πεντακόσια ευρώ (€8500)».

Τροποποίηση του Πίνακα του βασικού νόμου με την προσθήκη νέων Μερών σ' αυτό.

7. Ο Πίνακας του βασικού νόμου τροποποιείται με την προσθήκη, αμέσως μετά το Δεύτερος Μέρος αυτού, των ακόλουθων νέων Μερών:



CONFERENCE OF PARTIES TO THE INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS, 1978
Agenda item 10

STCW/CONF.2/33 1 July 2010 Original: ENGLISH

# ADOPTION OF THE FINAL ACT AND ANY INSTRUMENTS, RESOLUTIONS AND RECOMMENDATIONS RESULTING FROM THE WORK OF THE CONFERENCE

# Attachment 1 to the Final Act of the Conference

#### . Resolution 1

The Manila Amendments to the annex to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978

# Text adopted by the Conference

THE 2010 MANILA CONFERENCE,

RECALLING Article XII(1)(b) of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (hereinafter referred to as "the Convention"), concerning the procedure for amendment by a Conference of Parties,

HAVING CONSIDERED the Manila amendments to the annex to the Convention proposed and circulated to the Members of the Organization and to all Parties to the Convention,

- 1. ADOPTS, in accordance with article XII(1)(b)(ii) of the Convention, amendments to the annex to the Convention, the text of which is set out in the annex to the present resolution;
- 2. DETERMINES, in accordance with article XII(1)(a)(vii) of the Convention, that the amendments annexed hereto shall be deemed to have been accepted on 1 July 2011, unless, prior to that date, more than one third of Parties to the Convention or Parties the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant shipping of ships of 100 gross register tons or more have notified the Secretary-General that they object to the amendments;
- 3. INVITES Parties to note that, in accordance with article XII(1)(a)(ix) of the Convention, the amendments annexed hereto shall enter into force on 1 January 2012 upon being deemed to have been accepted in accordance with paragraph 2 above;
- 4. REQUESTS the Secretary-General of the Organization to transmit certified copies of the present resolution and the text of the amendments contained in the annex to all Parties to the Convention:
- 5. FURTHER REQUESTS the Secretary-General to transmit copies of this resolution and its annex to all Members of the Organization which are not Parties to the Convention.

## ANNEX

# THE MANILA AMENDMENTS TO THE ANNEX TO THE INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS, 1978

The annex to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, is replaced by the following:

## "ANNEX

## CHAPTER I

# General provisions

# Regulation I/1 Definitions and clarifications

- I For the purpose of the Convention, unless expressly provided otherwise:
  - .1 Regulations means regulations contained in the annex to the Convention;
  - .2 Approved means approved by the Party in accordance with these regulations;
  - .3 Master means the person having command of a ship;
  - .4 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;
  - .5. Deck officer means an officer qualified in accordance with the provisions of chapter II of the Convention;
  - .6 Chief mate means the 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;
  - .7 Engineer officer means an officer qualified in accordance with the provisions of regulation III/1, III/2 or III/3 of the Convention;
  - .8 Chief engineer officer means the senior engineer officer responsible for the mechanical propulsion and the operation and maintenance of the mechanical and electrical installations of the ship;
  - .9 Second engineer officer means the engineer officer next in rank to the chief engineer officer and upon whom the responsibility for the mechanical propulsion and the operation and maintenance of the mechanical and electrical installations of the ship will fall in the event of the incapacity of the chief engineer officer;
  - .10 Assistant engineer officer means a person under training to become an engineer officer and designated as such by national law or regulations;

- .11 Radio operator means a person holding an appropriate certificate issued or recognized by the Administration under the provisions of the Radio Regulations;
- .12 GMDSS radio operator means a person who is qualified in accordance with the provisions of chapter IV of the Convention;
- .13 Rating means a member of the ship's crew other than the master or an officer;
- .14 Near-coastal voyages means voyages in the vicinity of a Party as defined by that Party;
- .15 Propulsion power means the total maximum continuous rated output power, in kilowatts, of all the ship's main propulsion machinery which appears on the ship's certificate of registry or other official document;
- Radio duties include, as appropriate, watchkeeping and technical maintenance and repairs conducted in accordance with the Radio Regulations, the International Convention for the Safety of Life at Sea, 1974 (SOLAS), as amended and, at the discretion of each Administration, the relevant recommendations of the Organization;
- .17 Oil tanker means a ship constructed and used for the carriage of petroleum and petroleum products in bulk;
- .18 Chemical tanker means a ship constructed or adapted and used for the carriage in bulk of any liquid product listed in chapter 17 of the International Bulk Chemical Code;
- .19 Liquefied gas tanker means a ship constructed or adapted and used for the carriage in bulk of any liquefied gas or other product listed in chapter 19 of the International Gas Carrier Code;
- .20 Passenger ship means a ship as defined in the International Convention for the Safety of Life at Sea, 1974, as amended;
- .21 Ro-ro passenger ship means a passenger ship with ro-ro spaces or special category spaces as defined in the International Convention for the Safety of Life at Sea, 1974 (SOLAS), as amended;
- .22 Month means a calendar month or 30 days made up of periods of less than one month;
- .23 STCW Code means the Seafarers' Training, Certification and Watchkeeping (STCW) Code as adopted by the 1995 Conference resolution 2, as it may be amended by the Organization;
- .24 Function means a group of tasks, duties and responsibilities, as specified in the STCW Code, necessary for ship operation, safety of life at sea or protection of the marine environment;

- Company means the owner of the ship or any other organization or person such as the manager, or the bareboat charterer, who has assumed the responsibility for operation of the ship from the shipowner and who, on assuming such responsibility, has agreed to take over all the duties and responsibilities imposed on the company by these regulations;
- .26 Seagoing service means service on board a ship relevant to the issue or revalidation of a certificate or other qualification;
- 1SPS Code means the International Ship and Port Facility Security (ISPS) Code adopted on 12 December 2002, by resolution 2 of the Conference of Contracting Governments to the International Convention for the Safety of Life at Sea (SOLAS), 1974, as may be amended by the Organization;
  - 28 Ship security officer means the person on board the ship, accountable to the master, designated by the Company as responsible for the security of the ship including implementation and maintenance of the ship security plan and liaison with the company security officer and port facility security officers;
  - Security duties include all security tasks and duties on board ships as defined by chapter XI-2 of the International Convention for the Safety of Life at Sea (SOLAS 1974, as amended) and the International Ship and Port Facility Security (ISPS) Code;
  - Certificate of competency means a certificate issued and endorsed for masters, officers and GMDSS radio operators in accordance with the provisions of chapters II, III, IV or VII of this annex and entitling the lawful holder thereof to serve in the capacity and perform the functions involved at the level of responsibility specified therein;
  - .31 Certificate of proficiency means a certificate, other than a certificate of competency issued to a seafarer, stating that the relevant requirements of training, competencies or seagoing service in the Convention have been met;
  - .32 Documentary evidence means documentation, other than a certificate of competency or certificate of proficiency, used to establish that the relevant requirements of the Convention have been met;
  - .33 Electro-technical officer means an officer qualified in accordance with the provisions of regulation III/6 of the Convention;
  - .34 Able seafarer deck means a rating qualified in accordance with the provisions of regulation II/5 of the Convention;
  - .35 Able seafarer engine means a rating qualified in accordance with the provisions of regulation III/5 of the Convention; and
  - .36 Electro-technical rating means a rating qualified in accordance with the provisions of regulation III/7 of the Convention.

- These regulations are supplemented by the mandatory provisions contained in part A of the STCW Code and:
  - any reference to a requirement in a regulation also constitutes a reference to the corresponding section of part A of the STCW Code;
  - in applying these regulations, the related guidance and explanatory material contained in part B of the STCW Code should be taken into account to the greatest degree possible in order to achieve a more uniform implementation of the Convention provisions on a global basis;
  - amendments to part A of the STCW Code shall be adopted, brought into force and take effect in accordance with the provisions of article XII of the Convention concerning the amendment procedure applicable to the annex; and
  - .4 part B of the STCW Code shall be amended by the Maritime Safety Committee in accordance with its rules of procedure.
- 3 The references made in article VI of the Convention to "the Administration" and "the issuing Administration" shall not be construed as preventing any Party from issuing and endorsing certificates under the provisions of these regulations.

Certificates and endorsements

- 1 Certificates of competency shall be issued only by the Administration, following verification of the authenticity and validity of any necessary documentary evidence.
- 2 Certificates issued in accordance with the provisions of regulations V/1-1 and V/1-2 to masters and officers shall only be issued by an Administration.
- 3 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.
- 4 In respect of radio operators, Parties may:
  - .1 include the additional knowledge required by the relevant regulations in the examination for the issue of a certificate complying with the Radio Regulations; or
  - .2 issue a separate certificate indicating that the holder has the additional knowledge required by the relevant regulations.
- 5 The endorsement required by article VI of the Convention to attest the issue of a certificate shall only be issued if all the requirements of the Convention have been complied with.
- At the discretion of a Party, endorsements may be incorporated in the format of the certificates being issued as provided for in section A-I/2 of the STCW Code. If so incorporated, the form used shall be that set forth in section A-I/2, paragraph 1. If issued otherwise, the form of endorsements used shall be that set forth in paragraph 2 of that section.

- 7 An Administration which recognizes under regulation I/10:
  - .1 a certificate of competency; or
  - 2 a certificate of proficiency issued to masters and officers in accordance with the provisions of regulations V/1-1 and V/1-2 shall endorse such certificate to attest its recognition only after ensuring the authenticity and validity of the certificate.

The endorsement shall only be issued if all requirements of the Convention have been complied with. The form of the endorsement used shall be that set forth in paragraph 3 of section A-I/2 of the STCW Code.

- The endorsements referred to in paragraphs 5, 6 and 7:
  - .1 may be issued as separate documents;
  - .2 shall be issued by the Administration only;
  - shall each be assigned a unique number, except that endorsements attesting the issue of a certificate may be assigned the same number as the certificate concerned, provided that number is unique; and
  - .4 shall expire as soon as the certificate endorsed expires or is withdrawn, suspended or cancelled by the Party which issued it and, in any case, not more than five years after their date of issue.
- The capacity in which the holder of a certificate is authorized to serve shall be identified in the form of endorsement in terms identical to those used in the applicable safe manning requirements of the Administration.
- Administrations may use a format different from the format given in section A-I/2 of the STCW Code, provided that, as a minimum, the required information is provided in Roman characters and Arabic figures, taking into account the variations permitted under section A-I/2.
- Subject to the provisions of regulation I/10, paragraph 5, any certificate required by the Convention must be kept available in its original form on board the ship on which the holder is serving.
- Each Party shall ensure that certificates are issued only to candidates who comply with the requirements of this regulation.
- Candidates for certification shall provide satisfactory proof:
  - .1 of their identity;
  - .2 that their age is not less than that prescribed in the regulation relevant to the certificate applied for;
  - .3 that they meet the standards of medical fitness specified in section A-1/9 of the STCW Code;

- of having completed the seagoing service and any related compulsory training required by these regulations for the certificate applied for; and
- .5 that they meet the standards of competence prescribed by these regulations for the capacities, functions and levels that are to be identified in the endorsement to the certificate.
- Each Party undertakes to maintain a register or registers of all certificates and endorsements for masters, officers, and, as applicable, ratings which are issued, have expired or have been revalidated, suspended, cancelled or reported lost or destroyed and of dispensations issued.
- Each Party undertakes to make available information on the status of such certificates of competency, endorsements and dispensations to other Parties and companies which request verification of the authenticity and validity of certificates produced to them by seafarers seeking recognition of their certificates under regulation I/10 or employment on board ship.
- As of I January 2017, the information on the status of information required to be available in accordance with paragraph 15 of this regulation shall be made available, in the English language, through electronic means.

Principles governing near-coastal voyages

- 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.
- A Party that, for ships afforded the benefits of the near-coastal voyage provisions of the Convention, which includes voyages off the coast of other Parties within the limits of their near-coastal definition, shall enter into an undertaking with the Parties concerned specifying the details of both involved trading areas and other relevant conditions.
- 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. Seafarers serving on 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 appropriate competency requirements of the Convention.
- A Party may afford a ship which is entitled to fly its flag the benefits of the near-coastal voyage 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.
- The certificates of seafarers issued by a Party for its defined near-coastal voyages limits may be accepted by other Parties for service in their defined near-coastal voyages limits,

provided the Parties concerned enter into an undertaking specifying the details of involved trading areas and other relevant conditions thereof.

- Parties defining near-coastal voyages, in accordance with the requirements of this regulation, shall:
  - .1 meet the principles governing near-coastal voyages specified in section A-I/3;
  - communicate to the Secretary-General, in conformity with the requirements of regulation I/7, the details of the provisions adopted; and
  - incorporate the near-coastal voyages limits in the endorsements issued pursuant to regulation I/2, paragraphs 5, 6 or 7.
- 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:
  - verification in accordance with article X(1) that all seafarers serving on board who are required to be certificated in accordance with the Convention hold an appropriate certificate or a valid dispensation, or provide documentary proof that an application for an endorsement has been submitted to the Administration in accordance with regulation I/10, paragraph 5;
  - verification that the numbers and certificates of the seafarers serving on board are in conformity with the applicable safe manning requirements of the Administration; and
  - assessment, in accordance with section A-I/4 of the STCW Code, of the ability of the seafarers of the ship to maintain watchkeeping and security standards, as appropriate, as required by the Convention if there are clear grounds for believing that such standards are not being maintained because any of the following have occurred:
    - .3.1 the ship has been involved in a collision, grounding or stranding, or
    - .3.2 there has been a discharge of substances from the ship when under way, at anchor or at berth which is illegal under any international convention, or
    - .3.3 the ship has been manoeuvred in an erratic or unsafe manner whereby routeing measures adopted by the Organization or safe navigation practices and procedures have not been followed, or
    - .3.4 the ship is otherwise being operated in such a manner as to pose a danger to persons, property, the environment, or a compromise to security.

- 2 Deficiencies which may be deemed to pose a danger to persons, property or the environment include the following:
  - failure of seafarers to hold a certificate, to have an appropriate certificate, to have a valid dispensation or to provide documentary proof that an application for an endorsement has been submitted to the Administration in accordance with regulation I/10, paragraph 5;
  - .2 failure to comply with the applicable safe manning requirements of the Administration;
  - failure of navigational or engineering watch arrangements to conform to the requirements specified for the ship by the Administration;
  - .4 absence in a watch of a person qualified to operate equipment essential to safe navigation, safety radiocommunications or the prevention of marine pollution; and
  - inability to provide, for the first watch at the commencement of a voyage and for subsequent relieving watches, persons who are sufficiently rested and otherwise fit for duty.
- Failure to correct any of the deficiencies referred to in paragraph 2, in so far as it has been determined by the Party carrying out the control that they pose a danger to persons, property or the environment, shall be the only grounds under article X on which a Party may detain a ship.

# Regulation I/5 National provisions

- Each Party shall establish processes and procedures for the impartial investigation of any reported incompetency, act, omission or compromise to security that may pose a direct threat to safety of life or property at sea or to the marine environment by the holders of certificates or endorsements issued by that Party in connection with their performance of duties related to their certificates and for the withdrawal, suspension and cancellation of such certificates for such cause and for the prevention of fraud.
- 2 Each Party shall take and enforce appropriate measures to prevent fraud and other unlawful practices involving certificates and endorsements issued.
- 3 Each Party shall prescribe penalties or disciplinary measures for cases in which the provisions of its national legislation giving effect to the Convention are not complied with in respect of ships entitled to fly its flag or of seafarers duly certificated by that Party.
- In particular, such penalties or disciplinary measures shall be prescribed and enforced in cases in which:
  - .1 a company or a master has engaged a person not holding a certificate as required by the Convention;
  - .2 a master has allowed any function or service in any capacity required by these regulations to be performed by a person holding an appropriate certificate to be-

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performed by a person not holding the required certificate, a valid dispensation or having the documentary proof required by regulation I/10, paragraph 5; or

- a person has obtained by fraud or forged documents an engagement to perform any function or serve in any capacity required by these regulations to be performed or filled by a person holding a certificate or dispensation.
- A Party, within whose jurisdiction there is located any company which, or any person who, is believed on clear grounds to have been responsible for, or to have knowledge of, any apparent non-compliance with the Convention specified in paragraph 4, shall extend all co-operation possible to any Party which advises it of its intention to initiate proceedings under its jurisdiction.

# Regulation 1/6

Training and assessment

# Each Party shall ensure that:

- .1 the training and assessment of seafarers, as required under the Convention, are administered, supervised and monitored in accordance with the provisions of section A-I/6 of the STCW Code; and
- those responsible for the training and assessment of competence of seafarers, as required under the Convention, are appropriately qualified in accordance with the provisions of section A-I/6 of the STCW Code for the type and level of training or assessment involved.

# Regulation I/7

Communication of information

- In addition to the information required to be communicated by article IV, each Party shall provide to the Secretary-General, within the time periods prescribed and in the format specified in section A-I/7 of the STCW Code, such other information as may be required by the Code on other steps taken by the Party to give the Convention full and complete effect.
- When complete information as prescribed in article IV and section A-I/7 of the STCW Code has been received and such information confirms that full and complete effect is given to the provisions of the Convention, the Secretary-General shall submit a report to this effect to the Maritime Safety Committee.
- Following subsequent confirmation by the Maritime Safety Committee, in accordance with procedures adopted by the Committee, that the information which has been provided demonstrates that full and complete effect is given to the provisions of the Convention:
  - .1 the Maritime Safety Committee shall identify the Parties so concerned;
  - .2 shall review the list of Parties which communicated information that demonstrated that they give full and complete effect to the relevant provisions of the Convention, to retain in this list only the Parties so concerned; and

- other Parties shall be entitled, subject to the provisions of regulations I/4 and I/10, to accept, in principle, that certificates issued by or on behalf of the Parties identified in paragraph 3.1 are in compliance with the Convention.
- Amendments to the Convention and STCW Code, with dates of entry into force later than the date information has been, or will be, communicated to the Secretary-General in accordance with the provisions of paragraph 1, are not subject to the provisions of section A-I/7, paragraphs 1 and 2.

# Regulation I/8 Quality standards

# 1 Each Party shall ensure that:

- in accordance with the provisions of section A-I/8 of the STCW Code, all training, assessment of competence, certification, including medical certification, endorsement and revalidation activities carried out by non-governmental agencies or entities under its authority are continuously monitored through a quality standards system to ensure achievement of defined objectives, including those concerning the qualifications and experience of instructors and assessors; and
- .2 where governmental agencies or entities perform such activities, there shall be a quality standards system.
- Each Party shall also ensure that an evaluation is periodically undertaken, in accordance with the provisions of section A-I/8 of the STCW Code, by qualified persons who are not themselves involved in the activities concerned. This evaluation shall include all changes to national regulations and procedures in compliance with the amendments to the Convention and STCW Code, with dates of entry into force later than the date information was communicated to the Secretary-General.
- A report containing the results of the evaluation required by paragraph 2 shall be communicated to the Secretary-General in accordance with the format specified in section A-I/7 of the STCW Code.

# Regulation I/9

Medical standards

- Each Party shall establish standards of medical fitness for seafarers and procedures for the issue of a medical certificate in accordance with the provisions of this regulation and of section A-I/9 of the STCW Code.
- 2 Each Party shall ensure that those responsible for assessing the medical fitness of seafarers are medical practitioners recognized by the Party for the purpose of seafarer medical examinations, in accordance with the provisions of section A-I/9 of the STCW Code.
- 3 Every seafarer holding a certificate issued under the provisions of the Convention, who is serving at sea, shall also hold a valid medical certificate issued in accordance with the provisions of this regulation and of section A-I/9 of the STCW Code.

- 4 Every candidate for certification shall:
  - .1 be not less than 16 years of age;
  - .2 provide satisfactory proof of his/her identity; and
  - .3 meet the applicable medical fitness standards established by the Party.
- Medical certificates shall remain valid for a maximum period of two years unless the seafarer is under the age of 18, in which case the maximum period of validity shall be one year.
- If the period of validity of a medical certificate expires in the course of a voyage, then the medical certificate shall continue in force until the next port of call where a medical practitioner recognized by the Party is available, provided that the period shall not exceed three months.
- In urgent cases the Administration may permit a seafarer to work without a valid medical certificate until the next port of call where a medical practitioner recognized by the Party is available, provided that:
  - .1 the period of such permission does not exceed three months; and
  - .2 the seafarer concerned is in possession of an expired medical certificate of recent date.

Recognition of certificates

- Each Administration shall ensure that the provisions of this regulation are complied with, in order to recognize, by endorsement in accordance with regulation I/2, paragraph 7, a certificate issued by or under the authority of another Party to a master, officer or radio operator and that:
  - the Administration has confirmed, through an evaluation of that Party, which may include inspection of facilities and procedures, that the requirements of the Convention regarding standards of competence, training and certification and quality standards are fully complied with; and
  - .2 an undertaking is agreed with the Party concerned that prompt notification will be given of any significant change in the arrangements for training and certification provided in compliance with the Convention.
- Measures shall be established to ensure that seafarers who present, for recognition, certificates issued under the provisions of regulations II/2, III/2 or III/3, or issued under regulation VII/1 at the management level, as defined in the STCW Code, have an appropriate knowledge of the maritime legislation of the Administration relevant to the functions they are permitted to perform.
- 3 Information provided and measures agreed upon under this regulation shall be communicated to the Secretary-General in conformity with the requirements of regulation I/7.
- 4 Certificates issued by or under the authority of a non-Party shall not be recognized.

- Notwithstanding the requirement of regulation I/2, paragraph 7, an Administration may, if circumstances require, subject to the provisions of paragraph 1, allow a seafarer to serve for a period not exceeding three months on board a ship entitled to fly its flag, while holding an appropriate and valid certificate issued and endorsed as required by another Party for use on board that Party's ships but which has not yet been endorsed so as to render it appropriate for service on board ships entitled to fly the flag of the Administration. Documentary proof shall be readily available that application for an endorsement has been submitted to the Administration.
- 6 Certificates and endorsements issued by an Administration under the provisions of this regulation in recognition of, or attesting the recognition of, a certificate issued by another Party shall not be used as the basis for further recognition by another Administration.

Revalidation of certificates

- Every master, officer and radio operator holding a certificate issued or recognized under any chapter of the Convention other than chapter VI, who is serving at sea or intends to return to sea after a period ashore, shall, in order to continue to qualify for seagoing service, be required, at intervals not exceeding five years, to:
  - .1 meet the standards of medical fitness prescribed by regulation I/9; and
  - .2 establish continued professional competence in accordance with section A-I/11 of the STCW Code.
- 2 Every master, officer and radio operator shall, for continuing seagoing service on board ships for which special training requirements have been internationally agreed upon, successfully complete approved relevant training.
- Every master and officer shall, for continuing seagoing service on board tankers, meet the requirements in paragraph 1 of this regulation and be required, at intervals not exceeding five years, to establish continued professional competence for tankers in accordance with section A-I/11, paragraph 3 of the STCW Code.
- Each Party shall compare the standards of competence which it required of candidates for certificates issued before 1 January 2017 with those specified for the appropriate certificate in part A of the STCW Code, and shall determine the need for requiring the holders of such certificates to undergo appropriate refresher and updating training or assessment.
- The Party shall, in consultation with those concerned, formulate or promote the formulation of a structure of refresher and updating courses as provided for in section A-I/11 of the STCW Code.
- For the purpose of updating the knowledge of masters, officers and radio operators, each Administration shall ensure that the texts of recent changes in national and international regulations concerning the safety of life at sea, security and the protection of the marine environment are made available to ships entitled to fly its flag.

Use of simulators

- The performance standards and other provisions set forth in section A-I/12 and such other requirements as are prescribed in part A of the STCW Code for any certificate concerned shall be complied with in respect of:
  - .1 all mandatory simulator-based training;
  - .2 any assessment of competency required by part A of the STCW Code which is carried out by means of a simulator; and
  - any demonstration, by means of a simulator, of continued proficiency required by part A of the STCW Code.

# Regulation I/13

Conduct of trials

- These regulations shall not prevent an Administration from authorizing ships entitled to fly its flag to participate in trials.
- For the purposes of this regulation, the term *trial* means an experiment or series of experiments, conducted over a limited period, which may involve the use of automated or integrated systems in order to evaluate alternative methods of performing specific duties or satisfying particular arrangements prescribed by the Convention, which would provide at least the same degree of safety, security and pollution prevention as provided by these regulations.
- The Administration authorizing ships to participate in trials shall be satisfied that such trials are conducted in a manner that provides at least the same degree of safety, security and pollution prevention as provided by these regulations. Such trials shall be conducted in accordance with guidelines adopted by the Organization.
- Details of such trials shall be reported to the Organization as early as practicable but not less than six months before the date on which the trials are scheduled to commence. The Organization shall circulate such particulars to all Parties.
- The results of trials authorized under paragraph 1, and any recommendations the Administration may have regarding those results, shall be reported to the Organization, which shall circulate such results and recommendations to all Parties.
- Any Party having any objection to particular trials authorized in accordance with this regulation should communicate such objection to the Organization as early as practicable. The Organization shall circulate details of the objection to all Parties.
- An Administration which has authorized a trial shall respect objections received from other Parties relating to such trial by directing ships entitled to fly its flag not to engage in a trial while navigating in the waters of a coastal State which has communicated its objection to the Organization.
- 8 An Administration which concludes, on the basis of a trial, that a particular system will provide at least the same degree of safety, security and pollution prevention as provided by these

regulations may authorize ships entitled to fly its flag to continue to operate with such a system indefinitely, subject to the following requirements:

- the Administration shall, after results of the trial have been submitted in accordance with paragraph 5, provide details of any such authorization, including identification of the specific ships which may be subject to the authorization, to the Organization, which will circulate this information to all Parties;
- .2 any operations authorized under this paragraph shall be conducted in accordance with any guidelines developed by the Organization, to the same extent as they apply during a trial;
- .3 such operations shall respect any objections received from other Parties in accordance with paragraph 7, to the extent such objections have not been withdrawn; and
- .4 an operation authorized under this paragraph shall only be permitted pending a determination by the Maritime Safety Committee as to whether an amendment to the Convention would be appropriate, and, if so, whether the operation should be suspended or permitted to continue before the amendment enters into force.
- At the request of any Party, the Maritime Safety Committee shall establish a date for the consideration of the trial results and for the appropriate determinations.

# Regulation I/14

Responsibilities of companies

- 1 Each Administration shall, in accordance with the provisions of section A-I/14, hold companies responsible for the assignment of seafarers for service on their ships in accordance with the provisions of the present Convention, and shall require every such company to ensure that:
  - .1 each seafarer assigned to any of its ships holds an appropriate certificate in accordance with the provisions of the Convention and as established by the Administration;
  - .2 its ships are manned in compliance with the applicable safe manning requirements of the Administration;
  - .3 seafarers assigned to any of its ships have received refresher and updating training as required by the Convention;
  - .4 documentation and data relevant to all seafarers employed on its ships are maintained and readily accessible, and include, without being limited to, documentation and data on their experience, training, medical fitness and competency in assigned duties;
  - .5 seafarers, on being assigned to any of its ships, are familiarized with their specific duties and with all ship arrangements, installations, equipment, procedures and ship characteristics that are relevant to their routine or emergency duties;

- the ship's complement can effectively coordinate their activities in an emergency situation and in performing functions vital to safety, security and to the prevention or mitigation of pollution; and
- .7 at all times on board its ships there shall be effective oral communication in accordance with chapter V, regulation 14, paragraphs 3 and 4 of the International Convention for the Safety of Life at Sea, 1974 (SOLAS), as amended.

Transitional provisions

- Until 1 January 2017, a Party may continue to issue, recognize and endorse certificates in accordance with the provisions of the Convention which applied immediately prior to 1 January 2012 in respect of those seafarers who commenced approved seagoing service, an approved education and training programme or an approved training course before 1 July 2013.
- Until 1 January 2017, a Party may continue to renew and revalidate certificates and endorsements in accordance with the provisions of the Convention which applied immediately prior to 1 January 2012.

## CHAPTER II

# Master and deck department

Regulation II/1

Mandatory minimum requirements for certification of officers in charge of a navigational watch on ships of 500 gross tonnage or more

- 1 Every officer in charge of a navigational watch serving on a seagoing ship of 500 gross tonnage or more shall hold a certificate of competency.
- 2 Every candidate for certification shall:
  - .1 be not less than 18 years of age;
  - have approved seagoing service of not less than 12 months as part of an approved training programme which includes onboard training that meets the requirements of section A-II/1 of the STCW Code and is documented in an approved training record book, or otherwise have approved seagoing service of not less than 36 months:
  - have performed, during the required seagoing service, bridge watchkeeping duties under the supervision of the master or a qualified officer for a period of not less than six months;
  - .4 meet the applicable requirements of the regulations in chapter IV, as appropriate, for performing designated radio duties in accordance with the Radio Regulations;
  - .5 have completed approved education and training and meet the standard of competence specified in section A-II/1 of the STCW Code; and
  - .6 meet the standard of competence specified in section A-VI/1, paragraph 2, section A-VI/2, paragraphs 1 to 4, section A-VI/3, paragraphs 1 to 4 and section A-VI/4, paragraphs 1 to 3 of the STCW Code.

Regulation II/2

Mandatory minimum requirements for certification of masters and chief mates on ships of 500 gross tonnage or more

# Master and chief mate on ships of 3,000 gross tonnage or more

- Every master and chief mate on a seagoing ship of 3,000 gross tonnage or more shall hold a certificate of competency.
- 2 Every candidate for certification shall:
  - .1 meet the requirements for certification as an officer in charge of a navigational watch on ships of 500 gross tonnage or more and have approved seagoing service in that capacity:
    - .1.1 for certification as chief mate, not less than 12 months, and

- 1.2 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 seagoing service has been served as chief mate; and
- .2 have completed approved education and training and meet the standard of competence specified in section A-II/2 of the STCW Code for masters and chief mates on ships of 3,000 gross tonnage or more.

# Master and chief mate on ships of between 500 and 3,000 gross tonnage

- Every master and chief mate on a seagoing ship of between 500 and 3,000 gross tonnage shall hold a certificate of competency.
- 4 Every candidate for certification shall:
  - .1 for certification as chief mate, meet the requirements of an officer in charge of a navigational watch on ships of 500 gross tonnage or more;
  - .2 for certification as master, meet the requirements of an officer in charge of a navigational watch on ships of 500 gross tonnage or more and have approved seagoing service of not less than 36 months in that capacity; however, this period may be reduced to not less than 24 months if not less than 12 months of such seagoing service has been served as chief mate; and
  - have completed approved training and meet the standard of competence specified in section A-II/2 of the STCW Code for masters and chief mates on ships of between 500 and 3,000 gross tonnage.

Regulation II/3

Mandatory minimum requirements for certification of officers in charge of a navigational watch and of masters on ships of less than 500 gross tonnage

# Ships not engaged on near-coastal voyages

- 1 Every officer in charge of a navigational watch serving on a seagoing ship of less than 500 gross tonnage not engaged on near-coastal voyages shall hold a certificate of competency for ships of 500 gross tonnage or more.
- Every master serving on a seagoing ship of less than 500 gross tonnage not engaged on near-coastal voyages shall hold a certificate of competency for service as master on ships of between 500 and 3,000 gross tonnage.

# Ships engaged on near-coastal voyages Officer in charge of a navigational watch

3 Every officer in charge of a navigational watch on a seagoing ship of less than 500 gross tonnage engaged on near-coastal voyages shall hold a certificate of competency.

- Every candidate for certification as officer in charge of a navigational watch on a seagoing ship of less than 500 gross tonnage engaged on near-coastal voyages shall:
  - .1 be not less than 18 years of age;
  - .2 have completed:
    - .2.1 special training, including an adequate period of appropriate seagoing service as required by the Administration, or
    - .2.2 approved seagoing service in the deck department of not less than 36 months;
  - meet the applicable requirements of the regulations in chapter IV, as appropriate, for performing designated radio duties in accordance with the Radio Regulations;
  - .4 have completed approved education and training and meet the standard of competence specified in section A-II/3 of the STCW Code for officers in charge of a navigational watch on ships of less than 500 gross tonnage engaged on near-coastal voyages; and
  - .5 meet the standard of competence specified in section A-VI/1, paragraph 2, section A-VI/2, paragraphs 1 to 4, section A-VI/3, paragraphs 1 to 4 and section A-VI/4, paragraphs 1 to 3 of the STCW Code.

#### Master

- 5 Every master serving on a seagoing ship of less than 500 gross tonnage engaged on near-coastal voyages shall hold a certificate of competency.
- 6 Every candidate for certification as master on a seagoing ship of less than 500 gross tonnage engaged on near-coastal voyages shall:
  - .1 be not less than 20 years of age;
  - .2 have approved seagoing service of not less than 12 months as officer in charge of a navigational watch;
  - .3 have completed approved education and training and meet the standard of competence specified in section A-II/3 of the STCW Code for masters on ships of less than 500 gross tonnage engaged on near-coastal voyages; and
  - .4 meet the standard of competence specified in section A-VI/1, paragraph 2, section A-VI/2, paragraphs 1 to 4, section A-VI/3, paragraphs 1 to 4 and section A-VI/4, paragraphs 1 to 3 of the STCW Code.

# 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 section A-II/3 of the STCW Code unreasonable 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.

# Regulation II/4

Mandatory minimum requirements for certification of ratings forming part of a navigational watch

- Every rating forming part of a navigational watch on a seagoing ship of 500 gross tonnage or more, other than ratings under training and ratings whose duties while on watch are of an unskilled nature, shall be duly certificated to perform such duties.
- 2 Every candidate for certification shall:
  - .1 be not less than 16 years of age;
  - .2 have completed:
    - 2.1 approved seagoing service including not less than six months of training and experience, or
    - .2.2 special training, either pre-sea or on board ship, including an approved period of seagoing service which shall not be less than two months; and
  - .3 meet the standard of competence specified in section A-II/4 of the STCW Code.
- 3 The seagoing service, training and experience required by subparagraphs 2.2.1 and 2.2.2 shall be associated with navigational watchkeeping functions and involve the performance of duties carried out under the direct supervision of the master, the officer in charge of the navigational watch or a qualified rating.

# Regulation II/5

Mandatory minimum requirements for certification of ratings as able seafarer deck

- Every able seafarer deck serving on a seagoing ship of 500 gross tonnage or more shall be duly certificated.
- 2 Every candidate for certification shall:
  - .1 be not less than 18 years of age;
  - .2 meet the requirements for certification as a rating forming part of a navigational watch;

These requirements are not those for certification of Able Seamen as contained in the ILO Certification of Able Seamen Convention, 1946, or any subsequent convention.

- .3 while qualified to serve as a rating forming part of a navigational watch, have approved seagoing service in the deck department of:
  - .3.1 not less than 18 months, or
  - .3.2 not less than 12 months and have completed approved training; and
- .4 meet the standard of competence specified in section A-II/5 of the STCW Code.
- Every Party shall compare the standards of competence which it required of Able Seamen for certificates issued before 1 January 2012 with those specified for the certificate in section A-II/5 of the STCW Code, and shall determine the need, if any, for requiring these personnel to update their qualifications.
- 4 Until 1 January 2012, a Party which is also a Party to the International Labour Organization Certification of Able Seamen Convention, 1946 (No. 74) may continue to issue, recognize and endorse certificates in accordance with the provisions of the aforesaid convention.
- Until I January 2017, a Party which is also a Party to the International Labour Organization Certification of Able Seamen Convention, 1946 (No. 74) may continue to renew and revalidate certificates and endorsements in accordance with the provisions of the aforesaid convention.
- 6 Seafarers may be considered by the Party to have met the requirements of this regulation if they have served in a relevant capacity in the deck department for a period of not less than 12 months within the last 60 months preceding the entry into force of this regulation for that Party.

## CHAPTER III

# Engine department

Regulation III/1

Mandatory minimum requirements for certification of officers in charge of an engineering watch in a manned engine-room or designated duty engineers in a periodically unmanned engine-room

- Every officer in charge of an engineering watch in a manned engine-room or designated duty engineer officer in a periodically unmanned engine-room on a seagoing ship powered by main propulsion machinery of 750 kW propulsion power or more shall hold a certificate of competency.
- 2 Every candidate for certification shall:
  - .1 be not less than 18 years of age;
  - have completed combined workshop skills training and an approved seagoing service of not less than 12 months as part of an approved training programme which includes onboard training that meets the requirements of section A-III/1 of the STCW Code and is documented in an approved training record book, or otherwise have completed combined workshop skills training and an approved seagoing service of not less than 36 months of which not less than 30 months shall be seagoing service in the engine department;
  - have performed, during the required seagoing service, engine-room watchkeeping duties under the supervision of the chief engineer officer or a qualified engineer officer for a period of not less than six months;
  - .4 have completed approved education and training and meet the standard of competence specified in section A-III/1 of the STCW Code; and
  - meet the standard of competence specified in section A-VI/1, paragraph 2, section A-VI/2, paragraphs 1 to 4, section A-VI/3, paragraphs 1 to 4 and section A-VI/4, paragraphs 1 to 3 of the STCW Code.

Regulation III/2

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

- Every chief engineer officer and second engineer officer on a seagoing ship powered by main propulsion machinery of 3,000 kW propulsion power or more shall hold a certificate of competency.
- 2 Every candidate for certification shall:
  - .1 meet the requirements for certification as an officer in charge of an engineering watch on seagoing ships powered by main propulsion machinery of 750 kW propulsion power or more and have approved seagoing service in that capacity:

- .1.1 for certification as second engineer officer, have not less than 12 months as qualified engineer officer, and
- 1.2 for certification as chief engineer officer, have 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 seagoing service has been served as second engineer officer; and
- .2 have completed approved education and training and meet the standard of competence specified in section A-III/2 of the STCW Code.

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

- 1 Every chief engineer officer and second engineer officer on a seagoing ship powered by main propulsion machinery of between 750 kW and 3,000 kW propulsion power shall hold a certificate of competency.
- 2 Every candidate for certification shall:
  - .1 meet the requirements for certification as an officer in charge of an engineering watch and:
    - .1.1 for certification as second engineer officer, have not less than 12 months of approved seagoing service as assistant engineer officer or engineer officer, and
    - .1.2 for certification as chief engineer officer, have not less than 24 months of approved seagoing service of which not less than 12 months shall be served while qualified to serve as second engineer officer; and
  - .2 have completed approved education and training and meet the standard of competence specified in section A-III/3 of the STCW Code.
- Every engineer officer who is qualified to serve as second engineer officer on ships powered by main propulsion machinery of 3,000 kW propulsion power or more, may serve as chief engineer officer on ships powered by main propulsion machinery of less than 3,000 kW propulsion power, provided the certificate is so endorsed.

Regulation III/4

Mandatory minimum requirements for certification of ratings forming part of a watch in a manned engine-room or designated to perform duties in a periodically unmanned engine-room

Every rating forming part of an engine-room watch or designated to perform duties in a periodically unmanned engine-room on a seagoing ship powered by main propulsion machinery of 750 kW propulsion power or more, other than ratings under training and ratings whose duties are of an unskilled nature, shall be duly certificated to perform such duties.

- 2 Every candidate for certification shall:
  - .1 be not less than 16 years of age;
  - .2 have completed:
    - .2.1 approved seagoing service including not less than six months of training and experience, or
    - .2.2 special training, either pre-sea or on board ship, including an approved period of seagoing service which shall not be less than two months; and
  - .3 meet the standard of competence specified in section A-III/4 of the STCW Code.
- 3 The seagoing service, training and experience required by subparagraphs 2.2.1 and 2.2.2 shall be associated with engine-room watchkeeping functions and involve the performance of duties carried out under the direct supervision of a qualified engineer officer or a qualified rating.

Mandatory minimum requirements for certification of ratings as able seafarer engine in a manned engine-room or designated to perform duties in a periodically unmanned engine-room

- Every able seafarer engine serving on a seagoing ship powered by main propulsion machinery of 750 kW propulsion power or more shall be duly certificated.
- 2 Every candidate for certification shall:
  - .1 be not less than 18 years of age;
  - .2 meet the requirements for certification as a rating forming part of a watch in a manned engine-room or designated to perform duties in a periodically unmanned engine-room;
  - .3 while qualified to serve as a rating forming part of an engineering watch, have approved seagoing service in the engine department of:
    - .3.1 not less than 12 months, or
    - .3.2 not less than 6 months and have completed approved training; and
  - .4 meet the standard of competence specified in section A-III/5 of the STCW Code.
- Bevery Party shall compare the standard of competence which it required of ratings in the engine department for certificates issued before 1 January 2012 with those specified for the certificate in section A-III/5 of the STCW Code, and shall determine the need, if any, for requiring these personnel to update their qualifications.
- Seafarers may be considered by the Party to have met the requirements of this regulation if they have served in a relevant capacity in the engine department for a period of not less

than 12 months within the last 60 months preceding the entry into force of this regulation for that Party.

Regulation III/6

Mandatory minimum requirements for certification of electro-technical officers

- Every electro-technical officer serving on a seagoing ship powered by main propulsion machinery of 750 kW propulsion power or more shall hold a certificate of competency.
- 2 Every candidate for certification shall:
  - .1 be not less than 18 years of age;
  - have completed not less than 12 months of combined workshop skills training and approved seagoing service of which not less than 6 months shall be seagoing service as part of an approved training programme which meets the requirements of section A-III/6 of the STCW Code and is documented in an approved training record book, or otherwise not less than 36 months of combined workshop skills training and approved seagoing service of which not less than 30 months shall be seagoing service in the engine department;
  - .3 have completed approved education and training and meet the standard of competence specified in section A-III/6 of the STCW Code; and
  - .4 meet the standard of competence specified in section A-VI/1, paragraph 2, section A-VI/2, paragraphs 1 to 4, section A-VI/3, paragraphs 1 to 4 and section A-VI/4, paragraphs 1 to 3 of the STCW Code.
- 3 Every Party shall compare the standard of competence which it required of electro-technical officers for certificates issued before 1 January 2012 with those specified for the certificate in section A-III/6 of the STCW Code, and shall determine the need for requiring those personnel to update their qualifications.
- Seafarers may be considered by the Party to have met the requirements of this regulation if they have served in a relevant capacity on board a ship for a period of not less than 12 months within the last 60 months preceding the entry into force of this regulation for that Party and meet the standard of competence specified in section A-III/6 of the STCW Code.
- Notwithstanding the above requirements of paragraph 1 to 4, a suitably qualified person may be considered by a Party to be able to perform certain functions of section A-III/6.

Regulation III/7

Mandatory minimum requirements for certification of electro-technical ratings

Every electro-technical rating serving on a seagoing ship powered by main propulsion machinery of 750 kW propulsion power or more shall be duly certificated.

- 2 Every candidate for certification shall:
  - .1 be not less than 18 years of age;
  - .2 have:
    - .2.1 completed approved seagoing service including not less than 12 months training and experience, or
    - .2.2 completed approved training, including an approved period of seagoing service which shall not be less than 6 months, or
    - .2.3 qualifications that meet the technical competences in table A-III/7 and an approved period of seagoing service, which shall not be less than 3 months; and
  - .3 meet the standard of competence specified in section A-III/7 of the STCW Code.
- 3 Every Party shall compare the standard of competence which it required of electro-technical ratings for certificates issued before I January 2012 with those specified for the certificate in section A-III/7 of the STCW Code, and shall determine the need, if any, for requiring these personnel to update their qualifications.
- Seafarers may be considered by the Party to have met the requirements of this regulation if they have served in a relevant capacity on board a ship for a period of not less than 12 months within the last 60 months preceding the entry into force of this regulation for that Party and meet the standard of competence specified in section A-III/7 of the STCW Code.
- Notwithstanding the above requirements of paragraphs 1 to 4, a suitably qualified person may be considered by a Party to be able to perform certain functions of section A-III/7.

#### CHAPTER IV

# Radiocommunication and radio operators

# Explanatory note

Mandatory provisions relating to radio watchkeeping are set forth in the Radio Regulations and in the International Convention for the Safety of Life at Sea, 1974, as amended. Provisions for radio maintenance are set forth in the International Convention for the Safety of Life at Sea, 1974 (SOLAS), as amended, and the guidelines adopted by the Organization.

# Regulation IV/1

Application

- Except as provided in paragraph 2, the provisions of this chapter apply to radio operators on ships operating in the global maritime distress and safety system (GMDSS) as prescribed by the International Convention for the Safety of Life at Sea, 1974, as amended.
- Radio operators on ships not required to comply with the provisions of the GMDSS in chapter IV of the SOLAS Convention are not required to meet the provisions of this chapter. Radio operators on these ships are, nevertheless, required to comply with the Radio Regulations. The Administration shall ensure that the appropriate certificates as prescribed by the Radio Regulations are issued to or recognized in respect of such radio operators.

# Regulation IV/2

Mandatory minimum requirements for certification of GMDSS radio operators

- Every person in charge of or performing radio duties on a ship required to participate in the GMDSS shall hold an appropriate certificate related to the GMDSS, issued or recognized by the Administration under the provisions of the Radio Regulations.
- In addition, every candidate for certification of competency under this regulation for service on a ship, which is required by the International Convention for the Safety of Life at Sea, 1974, as amended, to have a radio installation, shall:
  - .1 be not less than 18 years of age; and
  - .2 have completed approved education and training and meet the standard of competence specified in section A-IV/2 of the STCW Code.

Refer to the Radio Maintenance Guidelines for the Global Maritime Distress and Safety System (GMDSS) Related to Sea Areas A3 and A4 adopted by the Organization by resolution A.702(17), as amended.

## CHAPTER V

# Special training requirements for personnel on certain types of ships

Regulation V/1-1

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

- Officers and ratings assigned specific duties and responsibilities related to cargo or cargo equipment on oil or chemical tankers shall hold a certificate in basic training for oil and chemical tanker cargo operations.
- 2 Every candidate for a certificate in basic training for oil and chemical tanker cargo operations shall have completed basic training in accordance with provisions of section A-VI/I of the STCW Code and shall have completed:
  - at least three months of approved seagoing service on oil or chemical tankers and meet the standard of competence specified in section A-V/1-1, paragraph 1 of the STCW Code; or
  - an approved basic training for oil and chemical tanker cargo operations and meet the standard of competence specified in section A-V/1-1, paragraph 1 of the STCW Code.
- Masters, chief engineer officers, chief mates, second engineer officers and any person with immediate responsibility for loading, discharging, care in transit, handling of cargo, tank cleaning or other cargo-related operations on oil tankers shall hold a certificate in advanced training for oil tanker cargo operations.
- 4 Every candidate for a certificate in advanced training for oil tanker cargo operations shall:
  - .1 meet the requirements for certification in basic training for oil and chemical tanker cargo operations; and
  - .2 while qualified for certification in basic training for oil and chemical tanker cargo operations, have:
    - .2.1 at least three months of approved seagoing service on oil tankers, or
    - .2.2 at least one month of approved onboard training on oil tankers, in a supernumerary capacity, which includes at least three loading and three unloading operations and is documented in an approved training record book taking into account guidance in section B-V/1; and
  - have completed approved advanced training for oil tanker cargo operations and meet the standard of competence specified in section A-V/1-1, paragraph 2 of the STCW Code.
- Masters, chief engineer officers, chief mates, second engineer officers and any person with immediate responsibility for loading, discharging, care in transit, handling of cargo, tank

cleaning or other cargo-related operations on chemical tankers shall hold a certificate in advanced training for chemical tanker cargo operations.

- 6 Every candidate for a certificate in advanced training for chemical tanker cargo operations shall:
  - .1 meet the requirements for certification in basic training for oil and chemical tanker cargo operations; and
  - .2 while qualified for certification in basic training for oil and chemical tanker cargo operations, have:
    - .2.1 at least three months of approved seagoing service on chemical tankers, or
    - .2.2 at least one month of approved onboard training on chemical tankers, in a supernumerary capacity, which includes at least three loading and three unloading operations and is documented in an approved training record book taking into account guidance in section B-V/1; and
  - have completed approved advanced training for chemical tanker cargo operations and meet the standard of competence specified in section A-V/1-1, paragraph 3 of the STCW Code.
- Administrations shall ensure that a certificate of proficiency is issued to seafarers, who are qualified in accordance with paragraphs 2, 4 or 6 as appropriate, or that an existing certificate of competency or certificate of proficiency is duly endorsed.

Regulation V/1-2

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

- Officers and ratings assigned specific duties and responsibilities related to cargo or cargo equipment on liquefied gas tankers shall hold a certificate in basic training for liquefied gas tanker cargo operations.
- Every candidate for a certificate in basic training for liquefied gas tanker cargo operations shall have completed basic training in accordance with provisions of section A-VI/1 of the STCW Code and shall have completed:
  - at least three months of approved seagoing service on liquefied gas tankers and meet the standard of competence specified in section A-V/1-2, paragraph 1 of the STCW Code; or
  - .2 an approved basic training for liquefied gas tanker cargo operations and meet the standard of competence specified in section A-V/1-2, paragraph 1 of the STCW Code.

- Masters, chief engineer officers, chief mates, second engineer officers and any person with immediate responsibility for loading, discharging, care in transit, handling of cargo, tank cleaning or other cargo-related operations on liquefied gas tankers shall hold a certificate in advanced training for liquefied gas tanker cargo operations.
- Every candidate for a certificate in advanced training for liquefied gas tanker cargo operations shall:
  - .1 meet the requirements for certification in basic training for liquefied gas tanker cargo operations; and
  - .2 while qualified for certification in basic training for liquefied gas tanker cargo operations, have:
    - .2.1 at least three months of approved seagoing service on liquefied gas tankers, or
    - .2.2 at least one month of approved onboard training on liquefied gas tankers, in a supernumerary capacity, which includes at least three loading and three unloading operations and is documented in an approved training record book taking into account guidance in section B-V/1; and
  - .3 have completed approved advanced training for liquefied gas tanker cargo operations and meet the standard of competence specified in section A-V/1-2, paragraph 2 of the STCW Code.
- Administrations shall ensure that a certificate of proficiency is issued to seafarers, who are qualified in accordance with paragraphs 2 or 4 as appropriate, or that an existing certificate of competency or certificate of proficiency is duly endorsed.

Mandatory minimum requirements for the training and qualifications of masters, officers, ratings and other personnel on passenger ships

- This regulation applies to masters, officers, ratings and other personnel serving on board passenger ships engaged on international voyages. Administrations shall determine the applicability of these requirements to personnel serving on passenger ships engaged on domestic voyages.
- 2 Prior to being assigned shipboard duties on board passenger ships, seafarers shall have completed the training required by paragraphs 4 to 7 below in accordance with their capacity, duties and responsibilities.
- Seafarers who are required to be trained in accordance with paragraphs 4, 6 and 7 below shall, at intervals not exceeding five years, undertake appropriate refresher training or be required to provide evidence of having achieved the required standard of competence within the previous five years.
- Masters, officers and other personnel designated on muster lists to assist passengers in emergency situations on board passenger ships shall have completed training in crowd management as specified in section A-V/2, paragraph 1 of the STCW Code.

- Personnel providing direct service to passengers in passenger spaces on board passenger ships shall have completed the safety training specified in section A-V/2, paragraph 2 of the STCW Code.
- Masters, chief engineer officers, chief mates, second engineer officers and any person designated on muster lists of having responsibility for the safety of passengers in emergency situations on board passenger ships shall have completed approved training in crisis management and human behaviour as specified in section A-V/2, paragraph 3 of the STCW Code.
- Masters, chief engineer officers, chief mates, second engineer officers and every person assigned immediate responsibility for embarking and disembarking passengers, loading, discharging or securing cargo, or closing hull openings on board ro-ro passenger ships shall have completed approved training in passenger safety, cargo safety and hull integrity as specified in section A-V/2, paragraph 4 of the STCW Code.
- 8 Administrations shall ensure that documentary evidence of the training which has been completed is issued to every person found qualified under the provisions of this regulation.

#### CHAPTER VI

# Emergency, occupational safety, security, medical care and survival functions

# Regulation VI/1

Mandatory minimum requirements for safety familiarization, basic training and instruction for all seafarers

- 1 Seafarers shall receive safety familiarization and basic training or instruction in accordance with section A-VI/1 of the STCW Code and shall meet the appropriate standard of competence specified therein.
- Where basic training is not included in the qualification for the certificate to be issued, a certificate of proficiency shall be issued, indicating that the holder has attended the course in basic training.

# Regulation VI/2

Mandatory minimum requirements for the issue of certificates of proficiency in survival craft, rescue boats and fast rescue boats

- Every candidate for a certificate of proficiency in survival craft and rescue boats other than fast rescue boats shall:
  - .1 be not less than 18 years of age;
  - .2 have approved seagoing service of not less than 12 months or have attended an approved training course and have approved seagoing service of not less than six months; and
  - meet the standard of competence for certificates of proficiency in survival craft and rescue boats, set out in section A-VI/2, paragraphs 1 to 4 of the STCW Code.
- 2 Every candidate for a certificate of proficiency in fast rescue boats shall:
  - .1 be the holder of a certificate of proficiency in survival craft and rescue boats other than fast rescue boats;
  - .2 have attended an approved training course; and
  - .3 meet the standard of competence for certificates of proficiency in fast rescue boats, set out in section A-VI/2, paragraphs 7 to 10 of the STCW Code.

# Regulation VI/3

Mandatory minimum requirements for training in advanced fire fighting

Seafarers designated to control fire-fighting operations shall have successfully completed advanced training in techniques for fighting fire, with particular emphasis on organization, tactics and command, in accordance with the provisions of section A-VI/3, paragraphs 1 to 4 of the STCW Code and shall meet the standard of competence specified therein.

Where training in advanced fire fighting is not included in the qualifications for the certificate to be issued, a certificate of proficiency shall be issued indicating that the holder has attended a course of training in advanced fire fighting.

Regulation VI/4

Mandatory minimum requirements relating to medical first aid and medical care

- Seafarers designated to provide medical first aid on board ship shall meet the standard of competence in medical first aid specified in section A-VI/4, paragraphs 1 to 3 of the STCW Code.
- Seafarers designated to take charge of medical care on board ship shall meet the standard of competence in medical care on board ships specified in section A-VI/4, paragraphs 4 to 6 of the STCW Code.
- Where training in medical first aid or medical care is not included in the qualifications for the certificate to be issued, a certificate of proficiency shall be issued indicating that the holder has attended a course of training in medical first aid or in medical care.

Regulation VI/5

Mandatory minimum requirements for the issue of certificates of proficiency for ship security officers

- Every candidate for a certificate of proficiency as ship security officer shall: 1
  - have approved seagoing service of not less than 12 months or appropriate .1 seagoing service and knowledge of ship operations; and
  - meet the standard of competence for certification of proficiency as ship security .2 officer, set out in section A-VI/5, paragraphs 1 to 4 of the STCW Code.
- . Administrations shall ensure that every person found qualified under the provisions of this regulation is issued with a certificate of proficiency.

Regulation VI/6

Mandatory minimum requirements for security-related training and instruction for all seafarers

- Seafarers shall receive security-related familiarization and security-awareness training or instruction in accordance with section A-VI/6, paragraphs 1 to 4 of the STCW Code and shall meet the appropriate standard of competence specified therein.
- Where security awareness is not included in the qualification for the certificate to be issued, a certificate of proficiency shall be issued indicating that the holder has attended a course in security awareness training.
- Every Party shall compare the security-related training or instruction it requires of seafarers who hold or can document qualifications before the entry into force of this regulation with those specified in section A-VI/6, paragraph 4 of the STCW Code, and shall determine the need for requiring these seafarers to update their qualifications.

#### Seafarers with designated security duties

- Seafarers with designated security duties shall meet the standard of competence specified in section A-VI/6, paragraphs 6 to 8 of the STCW Code.
- Where training in designated security duties is not included in the qualifications for the certificate to be issued, a certificate of proficiency shall be issued indicating that the holder has attended a course of training for designated security duties.
- Every Party shall compare the security training standards required of seafarers with designated security duties who hold or can document qualifications before the entry into force of this regulation with those specified in section A-VI/6, paragraph 8 of the STCW Code, and shall determine the need for requiring these seafarers to update their qualifications.

#### CHAPTER VII

#### Alternative certification

#### Regulation VII/1

Issue of alternative certificates

- Notwithstanding the requirements for certification laid down in chapters II and III of this annex, Parties may elect to issue or authorize the issue of certificates other than those mentioned in the regulations of those chapters, provided that:
  - the associated functions and levels of responsibility to be stated on the certificates and in the endorsements are selected from and identical to those appearing in sections A-III/1, A-III/2, A-III/3, A-III/4, A-III/5, A-III/1, A-III/2, A-III/4, A-III/5 and A-IV/2 of the STCW Code;
  - the candidates have completed approved education and training and meet the requirements for standards of competence, prescribed in the relevant sections of the STCW Code and as set forth in section A-VII/1 of this Code, for the functions and levels that are to be stated in the certificates and in the endorsements;
  - the candidates have completed approved seagoing service appropriate to the performance of the functions and levels that are to be stated on the certificate. The minimum duration of seagoing service shall be equivalent to the duration of seagoing service prescribed in chapters II and III of this annex. However, the minimum duration of seagoing service shall be not less than as prescribed in section A-VII/2 of the STCW Code;
  - .4 the candidates for certification who are to perform the function of navigation at the operational level shall meet the applicable requirements of the regulations in chapter IV, as appropriate, for performing designated radio duties in accordance with the Radio Regulations; and
  - .5 the certificates are issued in accordance with the requirements of regulation I/2 and the provisions set forth in chapter VII of the STCW Code.
- 2 No certificate shall be issued under this chapter unless the Party has communicated information to the Organization in accordance with article IV and regulation I/7.

#### Regulation VII/2

Certification of seafarers

Every seafarer who performs any function or group of functions specified in tables A-II/1, A-II/2, A-II/3, A-II/4 or A-II/5 of chapter II or in tables A-III/1, A-III/2, A-III/3, A-III/4 or A-III/5 of chapter III or A-IV/2 of chapter IV of the STCW Code shall hold a certificate of competency or certificate of proficiency, as applicable.

#### Regulation VII/3

Principles governing the issue of alternative certificates

- Any Party which elects to issue or authorize the issue of alternative certificates shall ensure that the following principles are observed:
  - .1 no alternative certification system shall be implemented unless it ensures a degree of safety at sea and has a preventive effect as regards pollution at least equivalent to that provided by the other chapters; and
  - .2 any arrangement for alternative certification issued under this chapter shall provide for the interchangeability of certificates with those issued under the other chapters.
- 2 The principle of interchangeability in paragraph 1 shall ensure that:
  - .1 seafarers certificated under the arrangements of chapters II and/or III and those certificated under chapter VII are able to serve on ships which have either traditional or other forms of shipboard organization; and
  - .2 seafarers are not trained for specific shipboard arrangements in such a way as would impair their ability to take their skills elsewhere.
- In issuing any certificate under the provisions of this chapter, the following principles shall be taken into account:
  - .1 the issue of alternative certificates shall not be used in itself:
    - .1.1 to reduce the number of crew on board,
    - .1.2 to lower the integrity of the profession or "de-skill" seafarers, or
    - .1.3 to justify the assignment of the combined duties of the engine and deck watchkeeping officers to a single certificate holder during any particular watch; and
  - .2 the person in command shall be designated as the master; and the legal position and authority of the master and others shall not be adversely affected by the implementation of any arrangement for alternative certification.
- 4 The principles contained in paragraphs 1 and 2 of this regulation shall ensure that the competency of both deck and engineer officers is maintained.

#### CHAPTER VIII

#### Watchkeeping

# Regulation VIII/1 Fitness for duty

- Each Administration shall, for the purpose of preventing fatigue:
  - .1 establish and enforce rest periods for watchkeeping personnel and those whose duties involve designated safety, security and prevention of pollution duties in accordance with the provisions of section A-VIII/1 of the STCW Code; and
  - .2 require that watch systems are so arranged that the efficiency of all watchkeeping personnel is not impaired by fatigue and that duties are so organized that the first watch at the commencement of a voyage and subsequent relieving watches are sufficiently rested and otherwise fit for duty.
- Each Administration shall, for the purpose of preventing drug and alcohol abuse, ensure that adequate measures are established in accordance with the provisions of section A-VIII/1 while taking into account the guidance given in section B-VIII/1 of the STCW Code.

### Regulation VIII/2

Watchkeeping arrangements and principles to be observed

- Administrations shall direct the attention of companies, masters, chief engineer officers and all watchkeeping personnel to the requirements, principles and guidance set out in the STCW Code which shall be observed to ensure that a safe continuous watch or watches appropriate to the prevailing circumstances and conditions are maintained on all seagoing ships at all times.
- Administrations shall require the master of every ship to ensure that watchkeeping arrangements are adequate for maintaining a safe watch or watches, taking into account the prevailing circumstances and conditions and that, under the master's general direction:
  - officers in charge of the navigational watch are responsible for navigating the ship safely during their periods of duty, when they shall be physically present on the navigating bridge or in a directly associated location such as the chartroom or bridge control room at all times;
  - .2 radio operators are responsible for maintaining a continuous radio watch on appropriate frequencies during their periods of duty;
  - officers in charge of an engineering watch, as defined in the STCW Code, under the direction of the chief engineer officer, shall be immediately available and on call to attend the machinery spaces and, when required, shall be physically present in the machinery space during their periods of responsibility;

- an appropriate and effective watch or watches are maintained for the purpose of safety at all times, while the ship is at anchor or moored and, if the ship is carrying hazardous cargo, the organization of such watch or watches takes full account of the nature, quantity, packing and stowage of the hazardous cargo and of any special conditions prevailing on board, afloat or ashore; and
- .5 as applicable, an appropriate and effective watch or watches are maintained for the purposes of security."

CONFERENCE OF PARTIES TO THE INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS, 1978
Agenda item 10

STCW/CONF.2/34 3 August 2010 Original: ENGLISH

ADOPTION OF THE FINAL ACT AND ANY INSTRUMENTS, RESOLUTIONS AND RECOMMENDATIONS RESULTING FROM THE WORK OF THE CONFERENCE

Attachment 2 to the Final Act of the Conference

#### Resolution 2

The Manila Amendments to the Seafarers' Training, Certification and Watchkeeping (STCW) Code

Text adopted by the Conference

THE 2010 MANILA CONFERENCE,

HAVING ADOPTED resolution 1 on Adoption of the Manila amendments to the annex to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978,

RECOGNIZING the importance of establishing detailed mandatory standards of competence and other mandatory provisions necessary to ensure that all seafarers shall be properly educated and trained, adequately experienced, skilled and competent to perform their duties in a manner which provides for the safety of life, property and security at sea and the protection of the marine environment,

ALSO RECOGNIZING the need to allow for the timely amendment of such mandatory standards and provisions in order to effectively respond to changes in technology, operations, practices and procedures used on board ships,

RECALLING that a large percentage of maritime casualties and pollution incidents are caused by human error,

APPRECIATING that one effective means of reducing the risks associated with human error in the operation of seagoing ships is to ensure that the highest practicable standards of training, certification and competence are maintained in respect of the seafarers who are or will be employed on such ships,

DESIRING to achieve and maintain the highest practicable standards for the safety of life, property and security at sea and in port and for the protection of the environment,

HAVING CONSIDERED amendments to the Seafarers' Training, Certification and Watchkeeping (STCW) Code, comprised in part A – Mandatory standards regarding provisions

of the annex to the 1978 STCW Convention, as amended, and part B – Recommended guidance regarding provisions of the 1978 STCW Convention, as amended, proposed and circulated to all Members of the Organization and all Parties to the Convention,

NOTING that regulation I/1, paragraph 2, of the annex to the 1978 STCW Convention provides that amendments to part A of the STCW Code shall be adopted, brought into force and take effect in accordance with the provisions of article XII of the Convention concerning the amendment procedure applicable to the annex,

HAVING CONSIDERED amendments to the STCW Code proposed and circulated to the Members of the Organization and to all Parties to the Convention,

- 1. ADOPTS amendments to the Seafarers' Training, Certification and Watchkeeping (STCW) Code, set out in annex to the present resolution;
- 2. DETERMINES, in accordance with article XII(1)(a)(vii) of the Convention, that the amendments to part A of the STCW Code shall be deemed to have been accepted on 1 July 2011, unless, prior to that date, more than one third of Parties or Parties the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant shipping of ships of 100 gross register tons or more have notified the Secretary-General that they object to the amendments;
- 3. INVITES Parties to note that, in accordance with article XII(1)(a)(ix) of the Convention, the amendments to part A of the STCW Code annexed hereto shall enter into force on 1 January 2012 upon being deemed to have been accepted in accordance with paragraph 2 above;
- 4. RECOMMENDS that the guidance contained in part B of the STCW Code, as amended, should be taken into account by all Parties to the 1978 STCW Convention as from the date of entry into force of the amendments to part A of the STCW Code;
- 5. REQUESTS the Maritime Safety Committee to keep the STCW Code under review and amend it, as appropriate;
- 6. ALSO REQUESTS the Secretary-General of the Organization to transmit certified copies of the present resolution and the text of amendments to the STCW Code contained in the annex to all Parties to the Convention;
- 7. FURTHER REQUESTS the Secretary-General to transmit copies of this resolution and its annex to all Members of the Organization which are not Parties to the Convention.

\* \* \*

#### ANNEX

# THE MANILA AMENDMENTS TO THE SEAFARERS' TRAINING, CERTIFICATION AND WATCHKEEPING (STCW) CODE

1 The part A of the Seafarers' Training, Certification and Watchkeeping (STCW) Code is replaced by the following:

#### "PART A

Mandatory standards regarding provisions of the annex to the STCW Convention

#### Introduction

- This part of the STCW Code contains mandatory provisions to which specific reference is made in the annex to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended, hereinafter referred to as the STCW Convention. These provisions give in detail the minimum standards required to be maintained by Parties in order to give full and complete effect to the Convention.
- Also contained in this part are standards of competence required to be demonstrated by candidates for the issue and revalidation of certificates of competency under the provisions of the STCW Convention. To clarify the linkage between the alternative certification provisions of chapter VII and the certification provisions of chapters II, III and IV, the abilities specified in the standards of competence are grouped, as appropriate, under the following seven functions:
  - .1 Navigation
  - .2 Cargo handling and stowage
  - .3 Controlling the operation of the ship and care for persons on board
  - .4 Marine engineering
  - ,5 Electrical, electronic and control engineering
  - .6 Maintenance and repair
  - .7 Radiocommunications

at the following levels of responsibility:

- .I Management level
- .2 Operational level
- .3 Support level

Functions and levels of responsibility are identified by subtitle in the tables of standards of competence given in chapters II, III and IV of this part. The scope of the function at the level of responsibility stated in a subtitle is defined by the abilities listed under it in column 1 of the table. The meaning of "function" and "level of responsibility" is defined in general terms in section A-I/1 below.

3 The numbering of the sections of this part corresponds with the numbering of the regulations contained in the annex to the STCW Convention. The text of the sections may be divided into numbered parts and paragraphs, but such numbering is unique to that text alone.

#### CHAPTER I

#### Standards regarding general provisions

#### Section A-I/1

Definitions and clarifications

- The definitions and clarifications contained in article II and regulation I/1 apply equally to the terms used in parts A and B of this Code. In addition, the following supplementary definitions apply only to this Code:
  - .1 Standard of competence means the level of proficiency to be achieved for the proper performance of functions on board ship in accordance with the internationally agreed criteria as set forth herein and incorporating prescribed standards or levels of knowledge, understanding and demonstrated skill;
  - .2 Management level means the level of responsibility associated with:
    - .2.1 serving as master, chief mate, chief engineer officer or second engineer officer on board a seagoing ship, and
    - .2.2 ensuring that all functions within the designated area of responsibility are properly performed;
  - .3 Operational level means the level of responsibility associated with:
    - .3.1 serving as officer in charge of a navigational or engineering watch or as designated duty engineer for periodically unmanned machinery spaces or as radio operator on board a seagoing ship, and
    - .3.2 maintaining direct control over the performance of all functions within the designated area of responsibility in accordance with proper procedures and under the direction of an individual serving in the management level for that area of responsibility;
  - .4 Support level means the level of responsibility associated with performing assigned tasks, duties or responsibilities on board a seagoing ship under the direction of an individual serving in the operational or management level;
  - .5 Evaluation criteria are the entries appearing in column 4 of the "Specification of Minimum Standard of Competence" tables in part A and provide the means for an assessor to judge whether or not a candidate can perform the related tasks, duties and responsibilities; and
  - .6 Independent evaluation means an evaluation by suitably qualified persons, independent of, or external to, the unit or activity being evaluated, to verify that the administrative and operational procedures at all levels are managed, organized, undertaken and monitored internally in order to ensure their fitness for purpose and achievement of stated objectives.

# Section A-I/2 Certificates and endorsements

Where, as provided in regulation I/2, paragraph 6, the endorsement required by article VI of the Convention is incorporated in the wording of the certificate itself, the certificate shall be issued in the format shown hereunder, provided that the words "or until the date of expiry of any extension of the validity of this certificate as may be shown overleaf" appearing on the front of the form and the provisions for recording extension of the validity appearing on the back of the form shall be omitted where the certificate is required to be replaced upon its expiry. Guidance on completion of the form is contained in section B-I/2 of this Code.

# (COUNTRY)

### CERTIFICATE ISSUED UNDER THE PROVISIONS OF THE INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS, 1978, AS AMENDED

has been found duly qualified in above Convention, as amended, ar	accordance with tood has been found itations indicated to the second contract of the second	he provisions of regulation		
FUNCTION	LEVEL	LIMITATIONS APPLYING (IF ANY)		
	,			
The lawful holder of this certificate applicable safe manning requirements		the following capacity or capacities specified in the stration:		
· CAPACITY		LIMITATIONS APPLYING (IF ANY)		
,				
Certificate No.		issued on		
(Official Seal)		Signature of duly authorized official		
Name of duly authorized official				
The original of this certificate mu, the Convention while its holder is		le in accordance with regulation I/2, paragraph 11 of		
Date of birth of the holder of the co	ertificate			
Signature of the holder of the certi-	ficate			
Photograph of the holder of the cer	rtificate			

The validity of this certificate is hereby extended until				
(Official Seal)	Signature of duly authorized official			
Date of revalidation	Name of duly authorized official			
The validity of this certificate is hereby extended until				
(Official Seal)	Signature of the authorized official			
Date of revalidation	Name of duly authorized official			

Except as provided in paragraph 1, the form used to attest the issue of a certificate shall be as shown hereunder, provided that the words "or until the date of expiry of any extension of the validity of this endorsement as may be shown overleaf" appearing on the front of the form and the provisions for recording extension of the validity appearing on the back of the form shall be omitted where the endorsement is required to be replaced upon its expiry. Guidance on completion of the form is contained in section B-I/2 of this Code.

# (COUNTRY)

# ENDORSEMENT ATTESTING THE ISSUE OF A CERTIFICATE UNDER THE PROVISIONS OF THE INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS, 1978, AS AMENDED

of regulation	who has been fou of the abo g functions, at the l	es that certificate No has been issued to nd duly qualified in accordance with the provisions ve Convention, as amended, and has been found evels specified, subject to any limitations indicated of any extension of the validity of this endorsement			
FUNCTION	LEVEL	LIMITATIONS APPLYING (IF ANY)			
·					
		·			
	٠,				
The lawful holder of this endorser applicable safe manning requirements		he following capacity or capacities specified in the ation:  LIMITATIONS APPLYING (IF ANY)			
CALACITI					
Endorsement No.	is	sued on			
(Official Seal)					
(	S	ignature of duly authorized official			
,	. ·	Name of duly authorized official			
The original of this endorsement method the Convention while its holder is		e in accordance with regulation I/2, paragraph 11 of			
Date of birth of the holder of the co	ertificate				
Signature of the holder of the certi	ficate				
_		·			
Photograph of the holder of the cer	rtificate				

The validity of this endorsement is hereby extended until				
(Official Seal)	Signature of duly authorized official			
Date of revalidation	Name of duly authorized official			
The validity of this endorsement is hereby extended until				
(Official Seal)	Signature of the authorized official			
Date of revalidation	Name of duly authorized official			

The form used to attest the recognition of a certificate shall be as shown hereunder, except that the words "or until the date of expiry of any extension of the validity of this endorsement as may be shown overleaf" appearing on the front of the form and the provisions for recording extension of the validity appearing on the back of the form shall be omitted where the endorsement is required to be replaced upon its expiry. Guidance on completion of the form is contained in section B-I/2 of this Code.

# (COUNTRY)

# ENDORSEMENT ATTESTING THE RECOGNITION OF A CERTIFICATE UNDER THE PROVISIONS OF THE INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS, 1978, AS AMENDED

The Government of	by or on behalf o	ertifies that certificate No issued to f the Government of is duly				
recognized in accordance with the pathe lawful holder is authorized to p	provisions of regula perform the followi or	tion I/10 of the above Convention, as amended, and ng functions, at the levels specified, subject to any until the date of expiry of any extension of the				
FUNCTION	LEVEL	LIMITATIONS APPLYING (IF ANY)				
		,				
	,					
,						
The lawful holder of this endorsen applicable safe manning requirement		ne following capacity or capacities specified in the ation:				
CAPACITY		LIMITATIONS APPLYING (IF ANY)				
Endorsement No.	is	sued on				
(Official Seal)		Signature of duly authorized official				
		Name of duly authorized official				
The original of this endorsement m the Convention while its holder is s		e in accordance with regulation I/2, paragraph 11 of				
Date of birth of the holder of the ce	rtificate	,				
•						
Photograph of the holder of the cert						
•						

The validity of this endorsement is hereby extended until				
(Official Seal)	Signature of duly authorized official			
Date of revalidation	Name of duly authorized official			
The validity of this endorsement is hereby extended until				
(Official Seal)	Signature of the authorized official			
Date of revalidation	Name of duly authorized official			

- In using formats which may be different from those set forth in this section, pursuant to regulation I/2, paragraph 10, Parties shall ensure that in all cases:
  - all information relating to the identity and personal description of the holder, including name, date of birth, photograph and signature, along with the date on which the document was issued, shall be displayed on the same side of the documents; and
  - .2 all information relating to the capacity or capacities in which the holder is entitled to serve, in accordance with the applicable safe manning requirements of the Administration, as well as any limitations, shall be prominently displayed and easily identified.

# ISSUE AND REGISTRATION OF CERTIFICATES

# Approval of seagoing service

In approving seagoing service required by the Convention, Parties should ensure that the service concerned is relevant to the qualification being applied for, bearing in mind that, apart from the initial familiarization with service in seagoing ships, the purpose of such service is to allow the seafarer to be instructed in and to practice, under appropriate supervision, those safe and proper seagoing practices, procedures and routines which are relevant to the qualification applied for.

# Approval of training courses

In approving training courses and programmes, Parties should take into account that the relevant IMO Model Courses can assist in the preparation of such courses and programmes and ensure that the detailed learning objectives recommended therein are suitably covered.

#### Electronic access to registers

- In the maintenance of the electronic register in accordance with paragraph 15 of regulation I/2, provisions shall be made to allow controlled electronic access to such register or registers to allow Parties and companies to confirm:
  - the name of the seafarer to whom such certificate, endorsement or other qualification was issued, its relevant number, date of issue and date of expiry;
  - .2 the capacity in which the holder may serve and any limitations attaching thereto; and
  - .3 the functions the holder may perform, the levels authorized and any limitations attached thereto.

#### Development of a database for certificate registration

- In implementing the requirement in paragraph 14 of regulation I/2 for the maintenance of a register of certificates and endorsements, a standard database is not necessary provided that all the relevant information is recorded and available in accordance with regulation I/2.
- The following items of information should be recorded and available, either on paper or electronically, in accordance with regulation I/2:

#### .1 Status of certificate

Valid Suspended Cancelled Reported lost Destroyed

with a record of changes to status to be kept, including dates of changes.

#### .2 Certificate details

Seafarer's name
Date of birth
Nationality
Gender
Preferably a photograph
Relevant document number
Date of issue
Date of expiry
Last revalidation date
Details of dispensation(s)

## .3 Competency details

STCW standard of competence (e.g., regulation II/1)
Capacity
Function
Level of responsibility
Endorsements
Limitations

#### .4 Medical details

Date of issue of latest medical certificate relating to the issue or revalidation of the certificate of competency.

#### Section A-I/3

Principles governing near-coastal voyages

- When a Party defines near-coastal voyages, *inter alia*, for the purpose of applying variations to the subjects listed in column 2 of the standard of competence tables contained in chapters II and III of part A of the Code, for the issue of certificates valid for service on ships entitled to fly the flag of that Party and engaged on such voyages, account shall be taken of the following factors, bearing in mind the effect on the safety and security of all ships and on the marine environment:
  - .1 type of ship and the trade in which it is engaged;
  - .2 gross tonnage of the ship and the propulsion power in kilowatts of the main machinery;
  - .3 nature and length of the voyages;
  - .4 maximum distance from a port of refuge;
  - .5 adequacy of the coverage and accuracy of navigational position-fixing devices;
  - .6 weather conditions normally prevailing in the near-coastal voyages area;
  - .7 provision of shipboard and coastal communication facilities for search and rescue; and
  - .8 the availability of shore-based support, regarding especially technical maintenance on board.
- 2 It is not intended that ships engaged on near-coastal voyages extend their voyages worldwide, under the excuse that they are navigating constantly within the limits of designated near-coastal voyages of neighbouring Parties.

#### Section A-I/4

Control procedures

The assessment procedure provided for in regulation I/4, paragraph 1.3, resulting from any of the occurrences mentioned therein shall take the form of a verification that members of the crew who are required to be competent do in fact possess the necessary skills related to the occurrence.

- It shall be borne in mind when making this assessment that onboard procedures are relevant to the International Safety Management (ISM) Code and that the provisions of this Convention are confined to the competence to safely execute those procedures.
- 3 Control procedures under this Convention shall be confined to the standards of competence of the individual seafarers on board and their skills related to watchkeeping as defined in part A of this Code. Onboard assessment of competency shall commence with verification of the certificates of the seafarers.
- Notwithstanding verification of the certificate, the assessment under regulation I/4, paragraph 1.3 can require the seafarer to demonstrate the related competency at the place of duty. Such demonstration may include verification that operational requirements in respect of watchkeeping standards have been met and that there is a proper response to emergency situations within the seafarer's level of competence.
- In the assessment, only the methods for demonstrating competence together with the criteria for its evaluation and the scope of the standards given in part A of this Code shall be used.
- Assessment of competency related to security shall be conducted for those seafarers with specific security duties only in case of clear grounds, as provided for in chapter XI/2 of the International Convention for the Safety of Life at Sea (SOLAS). In all other cases, it shall be confined to the verification of the certificates and/or endorsements of the seafarers.

#### Section A-I/5

National provisions

The provisions of regulation I/5 shall not be interpreted as preventing the allocation of tasks for training under supervision or in cases of *force majeure*.

#### Section A-I/6

Training and assessment

- 1 Each Party shall ensure that all training and assessment of seafarers for certification under the Convention is:
  - .1 structured in accordance with written programmes, including such methods and media of delivery, procedures, and course material as are necessary to achieve the prescribed standard of competence; and
  - .2 conducted, monitored, evaluated and supported by persons qualified in accordance with paragraphs 4, 5 and 6.
- 2 Persons conducting in-service training or assessment on board ship shall only do so when such training or assessment will not adversely affect the normal operation of the ship and they can dedicate their time and attention to training or assessment.

# Qualifications of instructors, supervisors and assessors\*

3 Each Party shall ensure that instructors, supervisors and assessors are appropriately qualified for the particular types and levels of training or assessment of competence of seafarers either on board or ashore, as required under the Convention, in accordance with the provisions of this section.

#### In-service training

- Any person conducting in-service training of a seafarer, either on board or ashore, which is intended to be used in qualifying for certification under the Convention, shall:
  - .1 have an appreciation of the training programme and an understanding of the specific training objectives for the particular type of training being conducted;
  - .2 be qualified in the task for which training is being conducted; and
  - .3 if conducting training using a simulator:
    - .3.1 have received appropriate guidance in instructional techniques involving the use of simulators; and
    - 3.2 have gained practical operational experience on the particular type of simulator being used.
- Any person responsible for the supervision of in-service training of a seafarer intended to be used in qualifying for certification under the Convention shall have a full understanding of the training programme and the specific objectives for each type of training being conducted.

#### Assessment of competence

- Any person conducting in-service assessment of competence of a seafarer, either on board or ashore, which is intended to be used in qualifying for certification under the Convention, shall:
  - .1 have an appropriate level of knowledge and understanding of the competence to be assessed;
  - .2 be qualified in the task for which the assessment is being made;
  - have received appropriate guidance in assessment methods and practice;
  - .4 have gained practical assessment experience; and
  - .5 if conducting assessment involving the use of simulators, have gained practical assessment experience on the particular type of simulator under the supervision and to the satisfaction of an experienced assessor.

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

#### Training and assessment within an institution

Each Party which recognizes a course of training, a training institution, or a qualification granted by a training institution, as part of its requirements for the issue of a certificate required under the Convention, shall ensure that the qualifications and experience of instructors and assessors are covered in the application of the quality standard provisions of section A-I/8. Such qualification, experience and application of quality standards shall incorporate appropriate training in instructional techniques, and training and assessment methods and practice, and shall comply with all applicable requirements of paragraphs 4 to 6.

#### Section A-I/7

Communication of information

The information required by regulation I/7, paragraph 1 shall be communicated to the Secretary-General in the formats prescribed in the paragraphs hereunder.

#### PART 1 - INITIAL COMMUNICATION OF INFORMATION

- Within one calendar year of entry into force of regulation I/7, each Party shall report on the steps it has taken to give the Convention full and complete effect, which report shall include the following:
  - .1 contact details and organization chart of the ministry, department or governmental agency responsible for administering the Convention;
  - a concise explanation of the legal and administrative measures provided and taken to ensure compliance, particularly with regulations I/2, I/6 and I/9;
  - a clear statement of the education, training, examination, competency assessment and certification policies adopted;
  - 4 a concise summary of the courses, training programmes, examinations and assessments provided for each certificate issued pursuant to the Convention;
  - a concise outline of the procedures followed to authorize, accredit or approve training and examinations, medical fitness and competency assessments required by the Convention, the conditions attached thereto, and a list of the authorizations, accreditations and approvals granted;
  - .6 a concise summary of the procedures followed in granting any dispensation under article VIII of the Convention; and
  - .7 the results of the comparison carried out pursuant to regulation I/11 and a concise outline of the refresher and upgrading training mandated.

#### PART 2 – SUBSEQUENT REPORTS

- 3 Each Party shall, within six months of:
  - .1 retaining or adopting any equivalent education or training arrangements pursuant to article IX, provide a full description of such arrangements;
  - .2 recognizing certificates issued by another Party, provide a report summarizing the measures taken to ensure compliance with regulation I/10; and
  - .3 authorizing the employment of seafarers holding alternative certificates issued under regulation VII/1 on ships entitled to fly its flag, provide the Secretary-General with a specimen copy of the type of safe manning documents issued to such ships.
- Each Party shall report the results of each evaluation carried out pursuant to regulation I/8, paragraph 2 within six months of its completion. The report of the evaluation shall include the following information:
  - the qualifications and experience of those who conducted the evaluation; (e.g., certificates of competency held, experience as a seafarer and independent evaluator, experience in the field of maritime training and assessment, experience in the administration of certification systems, or any other relevant qualifications/experience);
  - .2 the terms of reference for the independent evaluation and those of the evaluators;
  - .3 a list of training institutions/centres covered by the independent evaluation; and
  - .4 the results of the independent evaluation, including:
    - .1 verification that:
    - all applicable provisions of the Convention and STCW Code, including their amendments, are covered by the Party's quality standards system in accordance with section A-I/8, paragraph 3.1; and
    - all internal management control and monitoring measures and follow-up actions comply with planned arrangements and documented procedures and are effective in ensuring achievement of defined objectives in accordance with section A-I/8, paragraph 3.2;
    - .2 a brief description of:
    - .2.1 the non-conformities found, if any, during the independent evaluation,
    - .2.2 the corrective measures recommended to address the identified non-conformities, and
    - .2.3 the corrective measures carried out to address the identified non-conformities.

- Parties shall report the steps taken to implement any subsequent mandatory amendments to the Convention and STCW Code, not previously included in the report on the initial communication of information pursuant to regulation I/7 or any previous report pursuant to regulation I/8. The information shall be included in the next report pursuant to regulation I/8, paragraph 3, following the entry into force of the amendment.
- The information on the steps taken to implement mandatory amendments to the Convention and STCW Code shall include the following, where applicable:
  - .1 a concise explanation of the legal and administrative measures provided and taken to ensure compliance with the amendment;
  - a concise summary of any courses, training programmes, examinations and assessments provided to comply with the amendment;
  - a concise outline of the procedures followed to authorize, accredit or approve training and examinations, medical fitness and competency assessments required under the amendment;
  - .4 a concise outline of any refresher training and upgrading training required to meet the amendments; and
  - a comparison between the measures to implement the amendment and existing measures contained in previous reports pursuant to regulation I/7, paragraph 1 and/or regulation I/8, paragraph 2 where applicable.

#### PART 3 - PANEL OF COMPETENT PERSONS

- The Secretary-General shall maintain a list of competent persons approved by the Maritime Safety Committee, including competent persons made available or recommended by the Parties, who may be called upon to evaluate the reports submitted pursuant to regulation I/7 and regulation I/8 and may be called to assist in the preparation of the report required by regulation I/7, paragraph 2. These persons shall ordinarily be available during relevant sessions of the Maritime Safety Committee or its subsidiary bodies, but need not conduct their work solely during such sessions.
- 8 In relation to regulation I/7, paragraph 2, the competent persons shall be knowledgeable of the requirements of the Convention and at least one of them shall have knowledge of the system of training and certification of the Party concerned.
- When a report is received from any Party under regulation I/8, paragraph 3, the Secretary-General will designate competent persons from the list maintained in accordance with paragraph 7 above, to consider the report and provide their views on whether:
  - .1 the report is complete and demonstrates that the Party has carried out an independent evaluation of the knowledge, understanding, skills and competence acquisition and assessment activities, and of the administration of the certification system (including endorsement and revalidation), in accordance with section A-I/8, paragraph 3;
  - .2 the report is sufficient to demonstrate that:
    - .2.1 the evaluators were qualified,

- .2.2 the terms of reference were clear enough to ensure that:
  - .2.2.1 all applicable provisions of the Convention and STCW Code, including their amendments, are covered by the Party's quality standards system; and
  - .2.2.2 the implementation of clearly defined objectives in accordance with regulation I/8, paragraph 1 could be verified over the full range of relevant activities,
- .2.3 the procedures followed during the independent evaluation were appropriate to identify any significant non-conformities in the Party's system of training, assessment of competence, and certification of seafarers, as may be applicable to the Party concerned, and
- .2.4 the actions being taken to correct any noted non-conformities are timely and appropriate.
- Any meeting of the competent persons shall:
  - .1 be held at the discretion of the Secretary-General;
  - .2 be comprised of an odd number of members, ordinarily not to exceed five persons;
  - .3 appoint its own chairman; and
  - .4 provide the Secretary-General with the agreed opinion of its members, or if no agreement is reached, with both the majority and minority views.
- The competent persons shall, on a confidential basis, express their views in writing on:
  - .1 a comparison of the facts reported in the information communicated to the Secretary-General by the Party with all relevant requirements of the Convention;
  - .2 the report of any relevant evaluation submitted under regulation I/8, paragraph 3;
  - .3 the report of any steps taken to implement the amendments to the STCW Convention and Code submitted under paragraph 5; and
  - .4 any additional information provided by the Party.

Corrective actions must be timely and appropriate means those actions must be focused on the underpinning/root causes of deficiencies and must be arranged to take place in a prescribed time schedule.

#### PART 4 – REPORT TO THE MARÍTIME SAFETY COMMITTEE

- In preparing the report to the Maritime Safety Committee required by regulation I/7, paragraph 2, the Secretary-General shall:
  - .1 solicit and take into account the views expressed by competent persons selected from the list established pursuant to paragraph 7;
  - seek clarification, when necessary, from the Party of any matter related to the information provided under regulation I/7, paragraph 1; and
  - .3 identify any area in which the Party may have requested assistance to implement the Convention.
- The Party concerned shall be informed of the arrangements for the meetings of competent persons, and its representatives shall be entitled to be present to clarify any matter related to the information provided pursuant to regulation 1/7, paragraph 1.
- If the Secretary-General is not in a position to submit the report called for by paragraph 2 of regulation I/7, the Party concerned may request the Maritime Safety Committee to take the action contemplated by paragraph 3 of regulation I/7, taking into account the information submitted pursuant to this section and the views expressed in accordance with paragraphs 10 and 11.

#### Section A-I/8

Quality standards

#### National objectives and quality standards

- Each Party shall ensure that the education and training objectives and related standards of competence to be achieved are clearly defined and that the levels of knowledge, understanding and skills appropriate to the examinations and assessments required under the Convention are identified. The objectives and related quality standards may be specified separately for different courses and training programmes and shall cover the administration of the certification system.
- The field of application of the quality standards shall cover the administration of the certification system, all training courses and programmes, examinations and assessments carried out by or under the authority of a Party and the qualifications and experience required of instructors and assessors, having regard to the policies, systems, controls and internal quality assurance reviews established to ensure achievement of the defined objectives.
- Bach Party shall ensure that an independent evaluation of the knowledge, understanding, skills and competence acquisition and assessment activities, and of the administration of the certification system, is conducted at intervals of not more than five years in order to verify that:
  - .1 all applicable provisions of the Convention and STCW Code, including their amendments, are covered by the quality standards system;
  - .2 all internal management control and monitoring measures and follow-up actions comply with planned arrangements and documented procedures and are effective in ensuring achievement of the defined objectives;
  - .3 the results of each independent evaluation are documented and brought to the attention of those responsible for the area evaluated; and
    - .4 timely action is taken to correct deficiencies.

# Section A-I/9 Medical standards

Parties, when establishing standards of medical fitness for seafarers as required by regulation I/9, shall adhere to the minimum in-service eyesight standards set out in table A-I/9 and take into account the criteria for physical and medical fitness set out in paragraph 2. They should also take into account the guidance given in section B-I/9 of this Code and table B-I/9 regarding assessment of minimum physical abilities.

These standards may, to the extent determined by the Party without prejudice to the safety of the seafarers or the ship, differentiate between those persons seeking to start a career at sea and those seafarers already serving at sea and between different functions on board, bearing in mind the different duties of seafarers. They shall also take into account any impairment or disease that will limit the ability of the seafarer to effectively perform his/her duties during the validity period of the medical certificate.

- 2 The standards of physical and medical fitness established by the Party shall ensure that seafarers satisfy the following criteria:
  - have the physical capability, taking into account paragraph 5 below, to fulfil all the requirements of the basic training as required by section A-VI/1, paragraph 2;
  - .2 demonstrate adequate hearing and speech to communicate effectively and detect any audible alarms;
  - .3 have no medical condition, disorder or impairment that will prevent the effective and safe conduct of their routine and emergency duties on board during the validity period of the medical certificate;
  - are not suffering from any medical condition likely to be aggravated by service at sea or to render the seafarer unfit for such service or to endanger the health and safety of other persons on board; and
  - .5 are not taking any medication that has side effects that will impair judgment, balance, or any other requirements for effective and safe performance of routine and emergency duties on board.
- 3 Medical fitness examinations of seafarers shall be conducted by appropriately qualified and experienced medical practitioners recognized by the Party.
- 4 Each Party shall establish provisions for recognizing medical practitioners. A register of recognized medical practitioners shall be maintained by the Party and made available to other Parties, companies and seafarers on request.
- Each Party shall provide guidance for the conduct of medical fitness examinations and issuing of medical certificates, taking into account provisions set out in section B-I/9 of this Code. Each Party shall determine the amount of discretion given to recognized medical practitioners on the application of the medical standards, bearing in mind the different duties of seafarers, except that there shall not be discretion with respect to the minimum eyesight standards for distance vision aided, near/immediate vision and colour vision in table A-I/9 for seafarers in the deck department required to undertake look-out duties. A Party may allow discretion on the

application of these standards with regard to seafarers in the engine department, on the condition that seafarers' combined vision fulfils the requirements set out in table A-I/9.

- Each Party shall establish processes and procedures to enable seafarers who, after examination, do not meet the medical fitness standards or have had a limitation imposed on their ability to work, in particular with respect to time, field of work or trading area, to have their case reviewed in line with that Party's provisions for appeal.
- 7 The medical certificate provided for in regulation I/9, paragraph 3 shall include the following information as a minimum:
  - .1 Authorizing authority and the requirements under which the document is issued

#### .2 Seafarer information

- .2.1 Name: (Last, first, middle)
- .2.2 Date of birth: (day/month/year)
- .2.3 Gender: (Male/Female)
- .2.4 Nationality

#### .3 Declaration of the recognized medical practitioner

- .3.1 Confirmation that identification documents were checked at the point of examination: Y/N
- .3.2 Hearing meets the standards in section A-I/9: Y/N
- .3.3 Unaided hearing satisfactory? Y/N
- .3.4 Visual acuity meets standards in section A-I/9? Y/N
- .3.5 Colour vision\* meets standards in section A-I/9? Y/N
  - .3.5.1 Date of last colour vision test.
- .3.6 Fit for look-out duties? Y/N
- .3.7 No limitations or restrictions on fitness? Y/N If "N", specify limitations or restrictions.
- .3.8 Is the seafarer free from any medical condition likely to be aggravated by service at sea or to render the seafarer unfit for such service or to endanger the health of other persons on board?: Y/N
- .3.9 Date of examination: (day/month/year)
- .3.10 Expiry date of certificate: (day/month/year)

Note: Colour vision assessment only needs to be conducted every six years.

- .4 Details of the issuing authority
  - .4.1 Official stamp (including name) of the issuing authority
  - .4.2 Signature of the authorized person
- .5 Seafarer's signature confirming that the seafarer has been informed of the content of the certificate and of the right to a review in accordance with paragraph 6 of section A-I/9
- 8 Medical certificates shall be in the official language of the issuing country. If the language used is not English, the text shall include a translation into that language.

Table A-1/9
Minimum in-service eyesight standards for seafarers

STCW Category of Convention seafarer		Distance vision Aided <sup>1</sup>		Near/immediate vision	Colour vision <sup>3</sup>	Visual fields <sup>4</sup>	Night blindness <sup>4</sup>	Diplopia (double
regulation		One eye	Other eye	Both eyes together, aided or unaided				vision) <sup>4</sup>
I/11 II/1	Masters, deck officers and ratings required to			Vision required for ship's navigation (e.g., chart and	See Note 6	Normal Visual fields	Vision required to perform all necessary	No significant condition evident
11/2	undertake look-out	0.5 <sup>2</sup>	0.5	nautical publication reference, use of bridge instrumentation			functions in darkness without compromise	- Annual
II/3	duties							
II/4 II/5 VII/2		-		and equipment, and identification of aids to navigation)				
I/11 III/1 III/2 III/3 III/4 III/5 III/6 III/7 VII/2	All engineer officers, electrotechnical officers, electrotechnical ratings and ratings or others forming part of an engineroom watch	0.45	0.4 (see Note 5)	Vision required to read instruments in close proximity, to operate equipment, and to identify systems/ components as necessary	See Note 7	Sufficient visual fields	Vision required to perform all necessary functions in darkness without compromise	No significant condition evident
I/11 IV/2	GMDSS Radio operators	0.4	0.4	Vision required to read instruments in close proximity, to operate equipment, and to identify systems/ components as necessary	See Note 7	Sufficient visual fields	Vision required to perform all necessary functions in darkness without compromise	No significant condition evident

#### Notes:

- Values given in Snellen decimal notation.
- A value of at least 0.7 in one eye is recommended to reduce the risk of undetected underlying eye disease.
- As defined in the *International Recommendations for Colour Vision Requirements for Transport* by the Commission Internationale de l'Eclairage (CIE-143-2001 including any subsequent versions).
- Subject to assessment by a clinical vision specialist where indicated by initial examination findings.
- 5 Engine department personnel shall have a combined eyesight vision of at least 0.4.
- 6 CIE colour vision standard 1 or 2.
- 7 CIE colour vision standard 1, 2 or 3.

#### Section A-I/10

#### Recognition of certificates

- The provisions of regulation I/10, paragraph 4 regarding the non-recognition of certificates issued by a non-Party shall not be construed as preventing a Party, when issuing its own certificate, from accepting seagoing service, education and training acquired under the authority of a non-Party, provided the Party complies with regulation I/2 in issuing each such certificate and ensures that the requirements of the Convention relating to seagoing service, education, training and competence are complied with.
- Where an Administration which has recognized a certificate withdraws its endorsement of recognition for disciplinary reasons, the Administration shall inform the Party that issued the certificate of the circumstances.

# Section A-U11 Revalidation of certificates

# Professional competence

- Continued professional competence as required under regulation I/11 shall be established by:
  - .1 approved seagoing service, performing functions appropriate to the certificate held, for a period of at least:
    - .1.1 twelve months in total during the preceding five years, or
    - .1.2 three months in total during the preceding six months immediately prior to revalidating; or
  - .2 having performed functions considered to be equivalent to the seagoing service required in paragraph 1.1; or
  - .3 passing an approved test; or
  - .4 successfully completing an approved training course or courses; or
  - .5 having completed approved seagoing service, performing functions appropriate to the certificate held, for a period of not less than three months in a supernumerary capacity, or in a lower officer rank than that for which the certificate held is valid immediately prior to taking up the rank for which it is valid.
- The refresher and updating courses required by regulation I/11 shall be approved and include changes in relevant national and international regulations concerning the safety of life at sea, security and the protection of the marine environment and take account of any updating of the standard of competence concerned.
- 3 Continued professional competence for tankers as required under regulation I/11, paragraph 3 shall be established by:
  - .1 approved seagoing service, performing duties appropriate to the tanker certificate or, endorsement held, for a period of at least 3 months in total during the preceding 5 years; or

.2 successfully completing an approved relevant training course or courses.

#### Section A-I/12

Standards governing the use of simulators

#### PART 1 - PERFORMANCE STANDARDS

#### General performance standards for simulators used in training

- Each Party shall ensure that any simulator used for mandatory simulator-based training shall:
  - .1 be suitable for the selected objectives and training tasks;
  - .2 be capable of simulating the operating capabilities of shipboard equipment concerned, to a level of physical realism appropriate to training objectives, and include the capabilities, limitations and possible errors of such equipment;
  - .3 have sufficient behavioural realism to allow a trainee to acquire the skills appropriate to the training objectives;
  - .4 provide a controlled operating environment, capable of producing a variety of conditions, which may include emergency, hazardous or unusual situations relevant to the training objectives;
  - .5 provide an interface through which a trainee can interact with the equipment, the simulated environment and, as appropriate, the instructor; and
  - .6 permit an instructor to control, monitor and record exercises for the effective debriefing of trainees.

#### General performance standards for simulators used in assessment of competence

- Each Party shall ensure that any simulator used for the assessment of competence required under the Convention or for any demonstration of continued proficiency so required shall:
  - .1 be capable of satisfying the specified assessment objectives;
  - .2 be capable of simulating the operational capabilities of the shipboard equipment concerned to a level of physical realism appropriate to the assessment objectives, and include the capabilities, limitations and possible errors of such equipment;
  - .3 have sufficient behavioural realism to allow a candidate to exhibit the skills appropriate to the assessment objectives;
  - .4 provide an interface through which a candidate can interact with the equipment and simulated environment:
  - .5 provide a controlled operating environment, capable of producing a variety of conditions, which may include emergency, hazardous or unusual situations relevant to assessment objectives; and

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permit an assessor to control, monitor and record exercises for the effective assessment of the performance of candidates.

#### Additional performance standards

In addition to meeting the basic requirements set out in paragraphs 1 and 2, simulation equipment to which this section applies shall meet the performance standards given hereunder in accordance with their specific type.

#### Radar simulation

- Radar simulation equipment shall be capable of simulating the operational capabilities of navigational radar equipment which meets all applicable performance standards adopted by the Organization and incorporate facilities to:
  - operate in the stabilized relative-motion mode and sea- and ground-stabilized true-motion modes;
  - .2 model weather, tidal streams, current, shadow sectors, spurious echoes and other propagation effects, and generate coastlines, navigational buoys and search and rescue transponders; and
  - .3 create a real-time operating environment incorporating at least two own-ship stations with ability to change own ship's course and speed, and include parameters for at least 20 target ships and appropriate communication facilities.

# Automatic Radar Plotting Aid (ARPA) simulation

- ARPA simulation equipment shall be capable of simulating the operational capabilities of ARPAs which meet all applicable performance standards adopted by the Organization, and shall incorporate the facilities for:
  - .1 manual and automatic target acquisition;
  - ,.2 past track information;
  - .3 use of exclusion areas;
  - .4 vector/graphic time-scale and data display; and
  - .5 trial manoeuvres.

#### PART 2 - OTHER PROVISIONS

## Simulator training objectives

6 Each Party shall ensure that the aims and objectives of simulator-based training are defined within an overall training programme and that specific training objectives and tasks are selected so as to relate as closely as possible to shipboard tasks and practices.

See relevant/appropriate performance standards adopted by the Organization.

## Training procedures

- 7 In conducting mandatory simulator-based training, instructors shall ensure that:
  - .1 trainees are adequately briefed beforehand on the exercise objectives and tasks and are given sufficient planning time before the exercise starts;
  - .2 trainees have adequate familiarization time on the simulator and with its equipment before any training or assessment exercise commences;
  - .3 guidance given and exercise stimuli are appropriate to the selected exercise objectives and tasks and to the level of trainee experience;
  - .4 exercises are effectively monitored, supported as appropriate by audio and visual observation of trainee activity and pre- and post-exercise evaluation reports;
  - trainees are effectively debriefed to ensure that training objectives have been met and that operational skills demonstrated are of an acceptable standard;
  - .6 the use of peer assessment during debriefing is encouraged; and
  - .7 simulator exercises are designed and tested so as to ensure their suitability for the specified training objectives.

#### Assessment procedures

- 8 Where simulators are used to assess the ability of candidates to demonstrate levels of competency, assessors shall ensure that:
  - .1 performance criteria are identified clearly and explicitly and are valid and available to the candidates;
  - .2 assessment criteria are established clearly and are explicit to ensure reliability and uniformity of assessment and to optimize objective measurement and evaluation, so that subjective judgements are kept to the minimum;
  - .3 candidates are briefed clearly on the tasks and/or skills to be assessed and on the tasks and performance criteria by which their competency will be determined;
  - .4 assessment of performance takes into account normal operating procedures and any behavioural interaction with other candidates on the simulator or with simulator staff;
  - .5 scoring or grading methods to assess performance are used with caution until they have been validated; and
  - the prime criterion is that a candidate demonstrates the ability to carry out a task safely and effectively to the satisfaction of the assessor.

# Qualifications of instructors and assessors

Each Party shall ensure that instructors and assessors are appropriately qualified and experienced for the particular types and levels of training and corresponding assessment of competence as specified in regulation I/6 and section A-I/6.

Section A-I/13 Conduct of trials

(No provisions)

#### Section A-I/14

Responsibilities of companies

- Companies, masters and crew members each have responsibility for ensuring that the obligations set out in this section are given full and complete effect and that such other measures as may be necessary are taken to ensure that each crew member can make a knowledgeable and informed contribution to the safe operation of the ship.
- The company shall provide written instructions to the master of each ship to which the 2 Convention applies, setting forth the policies and the procedures to be followed to ensure that all seafarers who are newly employed on board the ship are given a reasonable opportunity to become familiar with the shipboard equipment, operating procedures and other arrangements needed for the proper performance of their duties, before being assigned to those duties. Such policies and procedures shall include:
  - allocation of a reasonable period of time during which each newly employed seafarer will have an opportunity to become acquainted with:
    - the specific equipment the seafarer will be using or operating; .1.1
    - ship-specific watchkeeping, safety, environmental protection, security and .1.2 emergency procedures and arrangements the seafarer needs to know to perform the assigned duties properly; and
  - designation of a knowledgeable crew member who will be responsible for .2 ensuring that an opportunity is provided to each newly employed seafarer to receive essential information in a language the seafarer understands.
- Companies shall ensure that masters, officers and other personnel assigned specific duties and responsibilities on board their ro-ro passenger ships shall have completed familiarization training to attain the abilities that are appropriate to the capacity to be filled and duties and responsibilities to be taken up, taking into account the guidance given in section B-I/14 of this Code.

Section A-I/15 Transitional provisions

(No provisions)

The relevant IMO Model Course(s) and resolution MSC.64(67), Recommendations on new and amended performance standards, may be of assistance in the preparation of courses.

#### CHAPTER II

## Standards regarding the master and deck department

#### Section A-II/1

Mandatory minimum requirements for certification of officers in charge of a navigational watch on ships of 500 gross tonnage or more

#### Standard of competence

- 1 Every candidate for certification shall:
  - .1 be required to demonstrate the competence to undertake, at the operational level, the tasks, duties and responsibilities listed in column 1 of table A-II/1;
  - .2 at least hold the appropriate certificate for performing VHF radiocommunications in accordance with the requirements of the Radio Regulations; and
  - .3 if designated to have primary responsibility for radiocommunications during distress incidents, hold the appropriate certificate issued or recognized under the provisions of the Radio Regulations.
- The minimum knowledge, understanding and proficiency required for certification is listed in column 2 of table A-II/1.
- 3 The level of knowledge of the subjects listed in column 2 of table A-II/1 shall be sufficient for officers of the watch to carry out their watchkeeping duties.\*
- 4 Training and experience to achieve the necessary level of theoretical knowledge, understanding and proficiency shall be based on section A-VIII/2, part 4-1 Principles to be observed in keeping a navigational watch and shall also take into account the relevant requirements of this part and the guidance given in part B of this Code.
- 5 Every candidate for certification shall be required to provide evidence of having achieved the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-Π/1.

#### Onboard training

- Every candidate for certification as officer in charge of a navigational watch of ships of 500 gross tonnage or more whose seagoing service, in accordance with paragraph 2.2 of regulation II/1, forms part of a training programme approved as meeting the requirements of this section shall follow an approved programme of onboard training which:
  - ensures that, during the required period of seagoing service, the candidate receives systematic practical training and experience in the tasks, duties and responsibilities of an officer in charge of a navigational watch, taking into account the guidance given in section B-II/1 of this Code;

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

- .2 is closely supervised and monitored by qualified officers aboard the ships in which the approved seagoing service is performed; and
- .3 is adequately documented in a training record book or similar document.\*

# Near-coastal voyages

- 7 The following subjects may be omitted from those listed in column 2 of table A-II/1 for issue of restricted certificates for service on near-coastal voyages, bearing in mind the safety of all ships which may be operating in the same waters:
  - .1 celestial navigation; and
  - .2 those electronic systems of position fixing and navigation that do not cover the waters for which the certificate is to be valid.

<sup>\*</sup> The relevant IMO Model Course(s) and a similar document produced by the International Shipping Federation may be of assistance in the preparation of training record books.

Table A-II/I

Specification of minimum standard of competence for officers in charge of a navigational watch on ships of 500 gross tonnage or more

Function: Navigation at the operational level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Plan and conduct a passage and determine position	Celestial navigation  Ability to use celestial bodies to determine the ship's position  Terrestrial and coastal navigation  Ability to determine the ship's position by use of:  .1 landmarks  .2 aids to navigation, including lighthouses, beacons and buoys  .3 dead reckoning, taking into account winds, tides, currents and estimated speed  Thorough knowledge of and ability to use nautical charts, and publications, such as sailing directions, tide tables, notices to mariners, radio navigational warnings and ships' routeing information  Electronic systems of position fixing and navigation	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate 4 approved laboratory equipment training using chart catalogues, charts, nautical publications, radio navigational warnings, sextant, azimuth mirror, electronic navigation equipment, echo-sounding equipment, compass	The information obtained from nautical charts and publications is relevant, interpreted correctly and properly applied. All potential navigational hazards are accurately identified  The primary method of fixing the ship's position is the most appropriate to the prevailing circumstances and conditions  The position is determined within the limits of acceptable instrument/system errors  The reliability of the information obtained from the primary method of position fixing is checked at appropriate intervals  Calculations and measurements of navigational information are accurate  The charts selected are the largest scale suitable for the area of navigation and charts and publications are corrected in accordance with the latest information available

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
	Ability to determine the ship's position by use of electronic navigational aids		Performance checks and tests to navigation systems comply with manufacturer's recommendations and good navigational practice
Plan and conduct a passage and determine position (continued)	Ability to operate the equipment and apply the information correctly  Compass – magnetic and gyro  Knowledge of the principles of magnetic and gyro-compasses  Ability to determine errors of the magnetic and gyro-compasses, using celestial and terrestrial		Errors in magnetic and gyro-compasses are determined and correctly applied to courses and bearings
	means, and to allow for such errors  Steering control system  Knowledge of steering control systems, operational procedures and change-over from manual to automatic control and vice versa.  Adjustment of controls for optimum performance		The selection of the mode of steering is the most suitable for the prevailing weather, sea and traffic conditions and intended manoeuvres.
	Meteorology  Ability to use and interpret information obtained from shipborne meteorological instruments  Knowledge of the characteristics of the various weather systems, reporting		Measurements and observations of weather conditions are accurate and appropriate to the passage
	procedures and recording systems  Ability to apply the meteorological information available		Meteorological information is correctly interpreted and applied

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Maintain a safe navigational watch	Thorough knowledge of the content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972, as amended  Thorough knowledge of the Principles to be observed in keeping a navigational watch  The use of routeing in accordance with the General Provisions on Ships' Routeing  The use of information from navigational equipment for maintaining a safe navigational watch  Knowledge of blind pilotage techniques  The use of reporting in accordance with the General Principles for Ship Reporting Systems and with VTS procedures	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience;  2 approved training ship experience  3 approved simulator training, where appropriate  4 approved laboratory equipment training	The conduct, handover and relief of the watch conforms with accepted principles and procedures  A proper look-out is maintained at all times and in such a way as to conform to accepted principles and procedures  Lights, shapes and sound signals conform with the requirements contained in the International Regulations for Preventing Collisions at Sea, 1972, as amended, and are correctly recognized  The frequency and extent of monitoring of traffic, the ship and the environment conform with accepted principles and procedures  A proper record is maintained of the movements and activities relating to the navigation of the ship  Responsibility for the safety of navigation is clearly defined at all times, including periods when the master is on the bridge and while under pilotage

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Maintain a safe navigational watch (continued)	Bridge resource management Knowledge of bridge resource management	Assessment of evidence obtained from one or more of the following:	Resources are allocated and assigned as needed in correct priority to perform necessary tasks
	principles, including:  .1 allocation, assignment, and prioritization of	.1 approved training .2 approved in-service	Communication is clearly and unambiguously given and received
	resources  .2 effective communication	experience  .3 approved simulator training	Questionable decisions and/or actions result in appropriate challenge and response
	.3 assertiveness and leadership		Effective leadership behaviours are identified
	.4 obtaining and maintaining situational awareness		Team member(s) share accurate understanding of current and predicted vessel state, navigation path, and
	.5 consideration of team experience		external environment
Use of radar and ARPA to maintain safety of navigation  Note: Training and assessment in the use of ARPA is not	Radar navigation  Knowledge of the fundamentals of radar and automatic radar plotting aids (ARPA)  Ability to operate and to	Assessment of evidence obtained from approved radar simulator and ARPA simulator plus in- service experience	Information obtained from radar and ARPA is correctly interpreted and analysed, taking into account the limitations of the equipment and prevailing circumstances and conditions
required for those who serve exclusively on ships not fitted with ARPA. This limitation shall be	interpret and analyse information obtained from radar, including the following:		
reflected in the endorsement issued to the seafarer concerned	Performance, including:  I factors affecting performance and accuracy		
	.2 setting up and maintaining displays .3 detection of		•
	misrepresentation of information, false echoes, sea return, etc., racons and SARTs	,	-

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Use of radar and ARPA to maintain safety of navigation (continued)  Note: Training and assessment in the use of ARPA is not required for those who serve exclusively on ships not fitted with ARPA. This limitation shall be reflected in the endorsement issued to the seafarer concerned	Use, including:  1 range and bearing; course and speed of other ships; time and distance of closest approach of crossing, meeting overtaking ships  2 identification of critical echoes; detecting course and speed changes of other ships; effect of changes in own ship's course or speed or both  3 application of the International Regulations for Preventing Collisions at Sea, 1972, as amended  4 plotting techniques and relative- and true-motion concepts  5 parallel indexing		Action taken to avoid a close encounter or collision with other vessels is in accordance with the International Regulations for Preventing Collisions at Sea, 1972, as amended  Decisions to amend course and/or speed are both timely and in accordance with accepted navigation practice  Adjustments made to the ship's course and speed maintain safety of navigation  Communication is clear, concise and acknowledged at all times in a seamanlike manner  Manoeuvring signals are made at the appropriate time and are in accordance with the International Regulations for Preventing Collisions at Sea, 1972, as amended

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Use of radar and ARPA to maintain safety of navigation (continued)	Principal types of ARPA, their display characteristics, performance standards and the dangers of over-reliance on ARPA		
Note: Training and assessment in the use of ARPA is not required for those who serve	Ability to operate and to interpret and analyse information obtained from ARPA, including:		
exclusively on ships not fitted with ARPA. This limitation shall be reflected in the	.1 system performance and accuracy, tracking capabilities and limitations, and processing delays		
endorsement issued to the seafarer concerned	.2 use of operational warnings and system . tests		
	.3 methods of target acquisition and their limitations		
	.4 true and relative vectors, graphic representation of target information and danger areas		
	.5 deriving and analysing information, critical echoes, exclusion areas and trial manoeuvres		,
Use of ECDIS to	and trial manoeuvres  Navigation using ECDIS	Examination and	Monitors information on
maintain the safety of navigation  Note: Training and		assessment of evidence obtained from one or more of	ECDIS in a manner that contributes to safe navigation
assessment in the use of ECDIS is not required for those who serve exclusively on ships not fitted with ECDIS	I a thorough understanding of Electronic Navigational Chart (ENC) data, data accuracy, presentation rules, display options and other chart data formats	the following:  .1 approved training ship experience  .2 approved ECDIS simulator training	Information obtained from ECDIS (including radar overlay and/or radar tracking functions, when fitted) is correctly interpreted and analysed, taking into account the limitations of the
These limitations shall be reflected in the endorsements issued to the seafarer concerned	.2 the dangers of over-reliance		equipment, all connected sensors (including radar and AIS where interfaced), and prevailing circumstances and conditions.

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
	required by performance standards in force		·
	Proficiency in operation, interpretation, and analysis of information obtained from ECDIS, including:  1 use of functions that are integrated with other	·	Safety of navigation is maintained through adjustments made to the ship's course and speed through ECDIS-controlled track-keeping functions
·	navigation systems in various installations, including proper functioning and adjustment to desired settings		(when fitted)  Communication is clear, concise and acknowledged at all times in a seamanlike manner
	adjustment of adjustment of information, including own position, sea area display, mode and orientation, chart data displayed, route monitoring, user-created information layers, contacts (when interfaced with AIS and/or radar tracking) and radar overlay functions (when		
	interfaced)  .3 confirmation of vessel position by alternative means		
	.4 efficient use of settings to ensure conformance to operational procedures, including alarm parameters for anti-grounding, proximity to contacts and special areas, completeness of chart data and chart update		
	status, and backup arrangements  .5 adjustment of settings and values to suit the present conditions		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Use of ECDIS to maintain the safety of navigation (continued)	.6 situational awareness while using ECDIS including safe water and proximity of hazards, set and drift, chart data and scale selection, suitability of route, contact detection and management, and integrity of sensors		
Respond to emergencies	Precautions for the protection and safety of passengers in emergency situations  Initial action to be taken following a collision or a grounding; initial damage assessment and control  Appreciation of the procedures to be followed for rescuing persons from the sea, assisting a ship in distress, responding to emergencies which arise in port	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate 4 practical training	The type and scale of the emergency is promptly identified  Initial actions and, if appropriate, manoeuvring of the ship are in accordance with contingency plans and are appropriate to the urgency of the situation and nature of the emergency
Respond to a distress signal at sea	Search and rescue  Knowledge of the contents of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual	Examination and assessment of evidence obtained from practical instruction or approved simulator training, where appropriate	The distress or emergency signal is immediately recognized  Contingency plans and instructions in standing orders are implemented and complied with

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Use the IMO Standard Marine Communication Phrases and use English in written and oral form	English language  Adequate knowledge of the English language to enable the officer to use charts and other nautical publications, to understand meteorological information and messages concerning ship's safety and operation, to communicate with other ships, coast stations and VTS centres and to perform the officer's duties also with a multilingual crew, including the ability to use and understand the IMO Standard Marine Communication Phrases (IMO SMCP)	Examination and assessment of evidence obtained from practical instruction	English language nautical publications and messages relevant to the safety of the ship are correctly interpreted or drafted  Communications are clear and understood
Transmit and receive information by visual signalling	Visual signalling  Ability to use the International Code of Signals  Ability to transmit and receive, by Morse light, distress signal SOS as specified in Annex IV of the International Regulations for Preventing Collisions at Sea, 1972, as amended, and appendix 1 of the International Code of Signals, and visual signalling of single-letter signals as also specified in the International Code of Signals	Assessment of evidence obtained from practical instruction and/or simulation	Communications within the operator's area of responsibility are consistently successful

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Manoeuvre the ship	Ship manoeuvring and handling  Knowledge of:  1 the effects of deadweight, draught, trim, speed and under-keel clearance on turning circles and stopping distances  2 the effects of wind and current on ship handling  3 manoeuvres and procedures for the rescue of person overboard  4 squat, shallow-water and similar effects	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate 4 approved training on a manned scale ship model, where appropriate	Safe operating limits of ship propulsion, steering and power systems are not exceeded in normal manoeuvres  Adjustments made to the ship's course and speed to maintain safety of navigation
	anchoring and mooring		

Function: Cargo handling and stowage at the operational level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Monitor the loading, stowage, securing, care during the voyage and the unloading of cargoes	Cargo handling, stowage and securing  Knowledge of the effect of cargo, including heavy lifts, on the seaworthiness and stability of the ship  Knowledge of safe handling, stowage and securing of cargoes, including dangerous, hazardous and harmful cargoes, and their effect on the safety of life and of the ship  Ability to establish and maintain effective communications during loading and unloading	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate	Cargo operations are carried out in accordance with the cargo plan or other documents and established safety rules/regulations, equipment operating instructions and shipboard stowage limitations  The handling of dangerous, hazardous and harmful cargoes complies with international regulations and recognized standards and codes of safe practice  Communications are clear, understood and consistently successful
Inspect and report defects and damage to cargo spaces, hatch covers and ballast tanks	Knowledge and ability to explain where to look for damage and defects most commonly encountered due to:  1 loading and unloading operations 2 corrosion 3 severe weather conditions Ability to state which parts of the ship shall be inspected each time in order to cover all parts within a given period of time Identify those elements of the ship structure which are critical to the safety of the ship	Examination and assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 approved training ship experience  .3 approved simulator training, where appropriate	The inspections are carried out in accordance with laid-down procedures, and defects and damage are detected and properly reported  Where no defects or damage are detected, the evidence from testing and examination clearly indicates adequate competence in adhering to procedures and ability to distinguish between normal and defective or damaged parts of the ship

It should be understood that deck officers need not be qualified in the survey of ships.

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Inspect and report defects and damage to cargo spaces, hatch covers and ballast tanks (continued)	State the causes of corrosion in cargo spaces and ballast tanks and how corrosion can be identified and prevented  Knowledge of procedures on how the inspections shall be carried out  Ability to explain how to ensure reliable detection of defects and damages  Understanding of the purpose of the "enhanced survey programme"		

Function: Controlling the operation of the ship and care for persons on board at the operational level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Ensure compliance with pollution- prevention requirements	Prevention of pollution of the marine environment and anti-pollution procedures  Knowledge of the precautions to be taken to prevent pollution of the marine environment  Anti-pollution procedures and all associated equipment  Importance of proactive measures to protect the marine environment	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved training	Procedures for monitoring shipboard operations and ensuring compliance with MARPOL requirements are fully observed  Actions to ensure that a positive environmental reputation is maintained
Maintain seaworthiness of the ship	Ship stability  Working knowledge and application of stability, trim and stress tables, diagrams and stress-calculating equipment  Understanding of fundamental actions to be taken in the event of partial loss of intact buoyancy  Understanding of the fundamentals of watertight integrity  Ship construction  General knowledge of the principal structural members of a ship and the proper names for the various parts	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate 4 approved laboratory equipment training	The stability conditions comply with the IMO intact stability criteria under all conditions of loading  Actions to ensure and maintain the watertight integrity of the ship are in accordance with accepted practice
Prevent, control and fight fires on board	Fire prevention and fire-fighting appliances  Ability to organize fire drills  Knowledge of classes and chemistry of fire  Knowledge of fire-fighting systems	Assessment of evidence obtained from approved fire-fighting training and experience as set out in section A-VI/3	The type and scale of the problem is promptly identified and initial actions conform with the emergency procedure and contingency plans for the ship  Evacuation, emergency shutdown and isolation

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
	Knowledge of action to be taken in the event of fire, including fires involving oil systems		procedures are appropriate to the nature of the emergency and are implemented promptly  The order of priority and the levels and time-scales of making reports and informing personnel on board are relevant to the nature of the emergency and reflect the urgency of the problem
Operate life-saving appliances	Ability to organize abandon ship drills and knowledge of the operation of survival craft and rescue boats, their launching appliances and arrangements, and their equipment, including radio life-saving appliances, satellite EPIRBs, SARTs, immersion suits and thermal protective aids	Assessment of evidence obtained from approved training and experience as set out in section A-VI/2, paragraphs 1 to 4	Actions in responding to abandon ship and survival situations are appropriate to the prevailing circumstances and conditions and comply with accepted safety practices and standards
Apply medical first aid on board ship	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	Assessment of evidence obtained from approved training as set out in section A-VI/4, paragraphs 1 to 3	probable cause, nature and extent of injuries or conditions is prompt and treatment minimizes immediate threat to life
Monitor compliance with legislative requirements	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment	Assessment of evidence obtained from examination or approved training	Legislative requirements relating to safety of life at sea, security and protection of the marine environment are correctly identified

Column 1	Çolumn 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Application of leadership and teamworking skills	Working knowledge of shipboard personnel management and training  A. knowledge of related international maritime conventions and recommendations, and national legislation  Ability to apply task and workload management, including:  1. planning and co-ordination  2. personnel assignment  3. time and resource constraints  4. prioritization  Knowledge and ability to apply effective resource management:  1. allocation, assignment, and prioritization of resources  2. effective communication onboard and ashore  3. decisions reflect consideration of team experiences  4. assertiveness and leadership, including motivation  5. obtaining and maintaining situational awareness	Assessment of evidence obtained from one or more of the following:  1 approved training 2 approved in-service experience 3 practical demonstration	The crew are allocated duties and informed of expected standards of work and behaviour in a manner appropriate to the individuals concerned  Training objectives and activities are based on assessment of current competence and capabilities and operational requirements  Operations are demonstrated to be in accordance with applicable rules  Operations are planned and resources are allocated as needed in correct priority to perform necessary tasks  Communication is clearly and unambiguously given and received  Effective leadership behaviours are demonstrated  Necessary team member(s) share accurate understanding of current and predicted vessel status and operational status and external environment  Decisions are most effective for the situation
L	<u> </u>	<u> </u>	<u> </u>

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Application of leadership and teamworking skills (continued)	Knowledge and ability to apply decision-making techniques:  1 situation and risk assessment  2 identify and consider generated options  3 selecting course of action  4 evaluation of outcome effectiveness		
Contribute to the safety of personnel and ship	Knowledge of personal survival techniques  Knowledge of fire prevention and ability to fight and extinguish fires  Knowledge of elementary first aid  Knowledge of personal safety and social responsibilities	Assessment of evidence obtained from approved training and experience as set out in section A-VI/1, paragraph 2	Appropriate safety and protective equipment is correctly used  Procedures and safe working practices designed to safeguard personnel and the ship are observed at all times  Procedures designed to safeguard the environment are observed at all times  Initial and follow-up action on becoming aware of an emergency conforms with established emergency response procedures

#### Section A-II/2

Mandatory minimum requirements for certification of masters and chief mates on ships of 500 gross tonnage or more

#### Standard of competence

- Every candidate for certification as master or chief mate of ships of 500 gross tonnage or more shall be required to demonstrate the competence to undertake, at the management level, the tasks, duties and responsibilities listed in column 1 of table A-II/2.
- 2 The minimum knowledge, understanding and proficiency required for certification is listed in column 2 of table A-II/2. This incorporates, expands and extends in depth the subjects listed in column 2 of table A-II/1 for officers in charge of a navigational watch.
- Bearing in mind that the master has ultimate responsibility for the safety and security of the ship, its passengers, crew and cargo, and for the protection of the marine environment against pollution by the ship, and that a chief mate shall be in a position to assume that responsibility at any time, assessment in these subjects shall be designed to test their ability to assimilate all available information that affects the safety and security of the ship, its passengers, crew or cargo, or the protection of the marine environment.
- The level of knowledge of the subjects listed in column 2 of table A-II/2 shall be sufficient to enable the candidate to serve in the capacity of master or chief mate.
- The level of theoretical knowledge, understanding and proficiency required under the different sections in column 2 of table A-II/2 may be varied according to whether the certificate is to be valid for ships of 3,000 gross tonnage or more or for ships of between 500 gross tonnage and 3,000 gross tonnage.
- Training and experience to achieve the necessary level of theoretical knowledge, understanding and proficiency shall take into account the relevant requirements of this part and the guidance given in part B of this Code.
- 7 Every candidate for certification shall be required to provide evidence of having achieved the required standard of competence in accordance with the methods for demonstrating competence and criteria for evaluating competence tabulated in columns 3 and 4 of table A-II/2.

#### Near-coastal voyages

8 An Administration may issue a certificate restricted to service on ships engaged exclusively on near-coastal voyages and, for the issue of such a certificate, may exclude such subjects as are 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.

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

# Table A-II/2

# Specification of minimum standard of competence for masters and chief mates on ships of 500 gross tonnage or more

Function: Navigation at the management level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Plan a voyage and conduct navigation	Voyage planning and navigation for all conditions by acceptable methods of plotting ocean tracks, taking into account, e.g.:  1 restricted waters  2 meteorological conditions  3 ice  4 restricted visibility  5 traffic separation schemes  6 vessel traffic service (VTS) areas  7 areas of extensive tidal effects  Routeing in accordance with the General Provisions on Ships' Routeing  Reporting in accordance with the General principles for Ship Reporting Systems and with VTS procedures	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved simulator training, where appropriate 3 approved laboratory equipment training using: chart catalogues, charts, nautical publications and ship particulars	The equipment, charts and nautical publications required for the voyage are enumerated and appropriate to the safe conduct of the voyage  The reasons for the planned route are supported by facts and statistical data obtained from relevant sources and publications  Positions, courses, distances and time calculations are correct within accepted accuracy standards for navigational equipment  All potential navigational hazards are accurately identified
Determine position and the accuracy of resultant position fix by any means	Position determination in all conditions:  1 by celestial observations  2 by terrestrial observations, including the ability to use appropriate charts, notices to mariners and other publications to assess the accuracy of the resulting position fix	experience  .2 approved simulator training, where appropriate	The primary method chosen for fixing the ship's position is the most appropriate to the prevailing circumstances and conditions  The fix obtained by celestial observations is within accepted accuracy levels
	.3 using modern electronic	.3 approved laboratory equipment training	The fix obtained by terrestrial observations is

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
	navigational aids, 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	using:  .1 charts, nautical almanac, plotting sheets, chronometer, sextant and a calculator  .2 charts, nautical publications and navigational instruments (azimuth mirror, sextant, log, sounding equipment, compass) and manufacturers' manuals	within accepted accuracy levels  The accuracy of the resulting fix is properly assessed  The fix obtained by the use of electronic navigational aids is within the accuracy standards of the systems in use. The possible errors affecting the accuracy of the resulting position are stated and methods of minimizing the effects of system errors on the resulting position are properly applied
		.3 radar, terrestrial electronic position-fixing systems, satellite navigation systems and appropriate nautical charts and publications	
Determine and allow for compass errors	Ability to determine and allow for errors of the magnetic and gyro-compasses  Knowledge of the principles of magnetic and gyro-compasses  An understanding of systems under the control of the master gyro and a knowledge of the operation and care of the main types of gyro-compass	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved simulator training, where appropriate  3 approved laboratory equipment training	The method and frequency of checks for errors of magnetic and gyrocompasses ensures accuracy of information
	-	using: celestial observations, terrestrial bearings and comparison between magnetic and gyro-compasses	

Column 1	Column 2	Column 3	Column 4	
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence	
Coordinate search and rescue operations	A thorough knowledge of and ability to apply the procedures contained in the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved simulator training, where appropriate 3 approved laboratory equipment training using: relevant publications, charts, meteorological data, particulars of ships involved, radiocommunication equipment and other available facilities and one or more of the following:  1 approved SAR training course 2 approved simulator training, where appropriate 3 approved laboratory equipment training	The plan for coordinating search and rescue operations is in accordance with international guidelines and standards  Radiocommunications are established and correct communication procedures are followed at all stages of the search and rescue operations	
Establish watchkeeping arrangements and procedures	Thorough knowledge of content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972, as amended  Thorough knowledge of the content, application and intent of the Principles to be observed in keeping a navigational watch	Examination and assessment of evidence obtained from one or more of the following:  1. approved in-service experience 2. approved simulator training, where appropriate	Watchkeeping arrangements and procedures are established and maintained in compliance with international regulations and guidelines so as to ensure the safety of navigation, protection of the marine environment and safety of the ship and persons on board	

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Maintain safe navigation through the use of information from navigation equipment and systems to assist command decision making  Note: Training and assessment in the use of ARPA is not required for those who serve exclusively on ships not fitted with ARPA. This limitation shall be reflected in the endorsement issued to the seafarer concerned	An appreciation of system errors and thorough understanding of the operational aspects of navigational systems  Blind pilotage planning  Evaluation of navigational information derived from all sources, including radar and ARPA, in order to make and implement command decisions for collision avoidance and for directing the safe navigation of the ship  The interrelationship and optimum use of all navigational data available for conducting navigation	Examination and assessment of evidence obtained from approved ARPA simulator and one or more of the following:  1 approved in-service experience 2 approved simulator training, where appropriate 3 approved laboratory equipment training	Information obtained from navigation equipment and systems is correctly interpreted and analysed, taking into account the limitations of the equipment and prevailing circumstances and conditions  Action taken to avoid a close encounter or collision with another vessel is in accordance with the International Regulations for Preventing Collisions at Sea, 1972, as amended
Maintain the safety of navigation through the use of ECDIS and associated navigation systems to assist command decision making  Note: Training and assessment in the use of ECDIS is not required for those who serve exclusively on ships not fitted with ECDIS. This limitation shall be reflected in the endorsement issued to the seafarer concerned	Management of operational procedures, system files and data, including:  1 manage procurement, licensing and updating of chart data and system software to conform to established procedures  2 system and information updating, including the ability to update ECDIS system version in accordance with vendor's product development  3 create and maintain system configuration and backup files  4 create and maintain log files in accordance with established procedures  5 create and maintain route plan files in accordance with established procedures	Assessment of evidence obtained from one of the following:  1 approved in-service experience 2 approved training ship experience 3 approved ECDIS simulator training	Operational procedures for using ECDIS are established, applied, and monitored  Actions taken to minimize risk to safety of navigation

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
	.6 use ECDIS log-book and track history functions for inspection of system functions, alarm settings and user responses		
	Use ECDIS playback functionality for passage review, route planning and review of system functions		
Forecast weather and oceanographic conditions	Ability to understand and interpret a synoptic chart and to forecast area weather, taking into account local weather conditions and information received by weather fax  Knowledge of the characteristics of various weather systems, including tropical revolving storms and avoidance of storm centres and the dangerous quadrants  Knowledge of ocean current systems  Ability to calculate tidal conditions  Use all appropriate nautical publications on tides and currents	Examination and assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 approved laboratory equipment training	The likely weather conditions predicted for a determined period are based on all available information  Actions taken to maintain safety of navigation minimize any risk to safety of the ship  Reasons for intended action are backed by statistical data and observations of the actual weather conditions
Respond to navigational emergencies	Precautions when beaching a ship  Action to be taken if grounding is imminent, and after grounding  Refloating a grounded ship with and without assistance  Action to be taken if collision is imminent and following a collision or impairment of the watertight integrity of the hull by any cause	Examination and assessment of evidence obtained from practical instruction, in-service experience and practical drills in emergency procedures	The type and scale of any problem is promptly identified and decisions and actions minimize the effects of any malfunction of the ship's systems  Communications are effective and comply with established procedures  Decisions and actions maximize safety of persons on board

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Manoeuvre and handle a ship in all conditions	Assessment of damage control Emergency steering Emergency towing arrangements and towing procedure Manoeuvring and handling a ship in all conditions, including:	Examination and assessment of evidence obtained from one or	All decisions concerning berthing and anchoring are based on a proper
conditions	Including:  1 manoeuvres when approaching pilot stations and embarking or disembarking pilots, with due regard to weather, tide, headreach and stopping distances  2 handling ship in rivers, estuaries and restricted waters, having regard to the effects of current, wind and restricted water on helm response  3 application of constant-rate-of-turn techniques  4 manoeuvring in shallow water, including the reduction in under-keel clearance caused by squat, rolling and pitching  5 interaction between passing ships and between own ship and nearby banks (canal effect)  6 berthing and unberthing under various conditions of wind, tide and current with and without tugs  7 ship and tug interaction  8 use of propulsion and manoeuvring systems	more of the following:  .1 approved in-service experience  .2 approved simulator training, where appropriate  .3 approved manned scale ship model, where appropriate	assessment of the ship's manoeuvring and engine characteristics and the forces to be expected while berthed alongside or lying at anchor  While under way, a full assessment is made of possible effects of shallow and restricted waters, ice, banks, tidal conditions, passing ships and own ship's bow and stern wave so that the ship can be safely manoeuvred under various conditions of loading and weather

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Manoeuvre and handle a ship in all conditions (continued)	.9 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		
	.10 dragging anchor; clearing fouled anchors		
	.11 dry-docking, both with and without damage	·	
	.12 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 trough of the sea, lessening drift and use of oil		
	.13 precautions in manoeuvring to launch rescue boats or survival craft in bad weather		
	.14 methods of taking on board survivors from rescue boats and survival craft		
	.15 ability to determine the manoeuvring and propulsion characteristics of common types of ships, with special reference to stopping distances and turning circles at various draughts and speeds		
	.16 importance of navigating at reduced speed to avoid damage caused by own ship's bow wave and stern wave		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Manoeuvre and handle a ship in all conditions (continued)	.17 practical measures to be taken when navigating in or near ice or in conditions of ice accumulation on board  .18 use of, and manoeuvring in and near, traffic separation schemes and in vessel traffic service (VTS) areas		
Operate remote controls of propulsion plant and engineering systems and services	Operating principles of marine power plants Ships' auxiliary machinery General knowledge of marine engineering terms	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience  2 approved simulator training, where appropriate	Plant, auxiliary machinery and equipment is operated in accordance with technical specifications and within safe operating limits at all times

# Function: Cargo handling and stowage at the management level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes	Knowledge of and ability to apply relevant international regulations, codes and standards concerning the safe handling, stowage, securing and transport of cargoes  Knowledge of the effect on trim and stability of cargoes and cargo operations  Use of stability and trim diagrams and stress-calculating equipment, including automatic-data-based (ADB) equipment, and knowledge of loading cargoes and ballasting in order to keep hull stress within acceptable limits	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved simulator training, where appropriate using: stability, trim and stress tables, diagrams and stress-calculating equipment	The frequency and extent of cargo condition monitoring is appropriate to its nature and prevailing conditions  Unacceptable or unforeseen variations in the condition or specification of the cargo are promptly recognized and remedial action is immediately taken and designed to safeguard the safety of the ship and those on board  Cargo operations are planned and executed in accordance with

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes (continued)	Stowage and securing of cargoes on board ships, including cargo-handling gear and securing and lashing equipment  Loading and unloading operations, with special regard to the transport of cargoes identified in the Code of Safe Practice for Cargo Stowage and Securing  General knowledge of tankers and tanker operations  Knowledge of the operational and design limitations of bulk carriers  Ability to use all available shipboard data related to loading, care and unloading of bulk cargoes  Ability to establish procedures for safe cargo handling in accordance with the provisions of the relevant instruments such as IMDG Code, IMSBC Code, MARPOL 73/78  Annexes III and V and other relevant information  Ability to explain the basic principles for establishing effective communications and improving working relationship between ship and terminal personnel		established procedures and legislative requirements  Stowage and securing of cargoes ensures that stability and stress conditions remain within safe limits at all times during the voyage

Column 1	Column 2	Column 3	. Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Assess reported defects and damage to cargo spaces, hatch covers and ballast tanks and take appropriate action	Knowledge of the limitations on strength of the vital constructional parts of a standard bulk carrier and ability to interpret given figures for bending moments and shear forces  Ability to explain how to avoid the detrimental effects on bulk carriers of corrosion, fatigue and inadequate cargo handling	Examination and assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 approved simulator training, where appropriate  using: stability, trim and stress tables, diagrams and stress-calculating equipment	Evaluations are based on accepted principles, well-founded arguments and correctly carried out. The decisions taken are acceptable, taking into consideration the safety of the ship and the prevailing conditions
Carriage of dangerous goods	International regulations, standards, codes and recommendations on the carriage of dangerous cargoes, including the International Maritime Dangerous Goods (IMDG) Code and the International Maritime Solid Bulk Cargoes (IMSBC) Code  Carriage of dangerous, hazardous and harmful cargoes; precautions during loading and unloading and care during the voyage	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience  2 approved simulator training, where appropriate  3 approved specialist training	Planned distribution of cargo is based on reliable information and is in accordance with established guidelines and legislative requirements  Information on dangers, hazards and special requirements is recorded in a format suitable for easy reference in the event of an incident

Function: Controlling the operation of the ship and care for persons on board at the management level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Control trim, stability and stress	Understanding of fundamental principles of ship construction and the theories and factors affecting trim and stability and measures necessary to preserve trim and stability  Knowledge of the effect on trim and stability of a ship in the event of damage to and consequent flooding of a compartment and countermeasures to be taken  Knowledge of IMO recommendations concerning ship stability	Examination and assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 approved training ship experience  .3 approved simulator training, where appropriate	Stability and stress conditions are maintained within safe limits at all times

Column 1	Column 2	Column 3	Column 4
Competence .	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Monitor and control compliance with legislative requirements and	Knowledge of international maritime law embodied in international agreements and conventions	Examination and assessment of evidence obtained from one or more of the following:	Procedures for monitoring operations and maintenance comply with legislative requirements
measures to ensure safety of life at sea, security and the protection of the marine environment	Regard shall be paid especially to the following subjects:  1 certificates and other documents required to be carried on board ships by international conventions, how they may be obtained and their period of validity  2 responsibilities under the relevant requirements of the International Convention on Load Lines, 1966, as amended  3 responsibilities under the relevant requirements of the International Convention for the Safety of Life at Sea, 1974, as amended  4 responsibilities under the International Convention for the Prevention of Pollution from Ships, as amended  5 maritime declarations of health and the requirements	<ol> <li>approved in-service experience</li> <li>approved training ship experience</li> <li>approved simulator training, where appropriate</li> </ol>	Potential non-compliance is promptly and fully identified  Planned renewal and extension of certificates ensures continued validity of surveyed items and equipment
·	health and the requirements of the International Health Regulations  .6 responsibilities under international instruments affecting the safety of the ship, passengers, crew and cargo		
	.7 methods and aids to prevent pollution of the marine environment by ships		
	.8 national legislation for implementing international agreements and conventions		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Maintain safety and security of the ship's crew and passengers and the operational condition of life- saving, fire- fighting and other safety systems	Thorough knowledge of life-saving appliance regulations (International Convention for the Safety of Life at Sea)  Organization of fire drills and abandon ship drills  Maintenance of operational condition of life-saving, fire-fighting and other safety systems  Actions to be taken to protect and safeguard all persons on board in emergencies  Actions to limit damage and salve the ship following a fire, explosion, collision or grounding	Examination and assessment of evidence obtained from practical instruction and approved in-service training and experience	Procedures for monitoring fire-detection and safety systems ensure that all alarms are detected promptly and acted upon in accordance with established emergency procedures
Develop emergency and damage control plans and handle emergency situations	Preparation of contingency plans for response to emergencies  Ship construction, including damage control  Methods and aids for fire prevention, detection and extinction  Functions and use of life-saving appliances	Examination and assessment of evidence obtained from approved in-service training and experience	Emergency procedures are in accordance with the established plans for emergency situations

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Use of leadership and managerial skill	Knowledge of shipboard personnel management and training  A knowledge of related international maritime conventions and recommendations, and national legislation  Ability to apply task and workload management, including:  1 planning and co-ordination  2 personnel assignment  3 time and resource constraints  4 prioritization  Knowledge and ability to apply effective resource management:  1 allocation, assignment, and prioritization of resources  2 effective communication on board and ashore	Assessment of evidence obtained from one or more of the following:  1 approved training 2 approved in-service experience 3 approved simulator training	The crew are allocated duties and informed of expected standards of work and behaviour in a manner appropriate to the individuals concerned  Training objectives and activities are based on assessment of current competence and capabilities and operational requirements  Operations are demonstrated to be in accordance with applicable rules
	.3 decisions reflect consideration of team experiences  .4 assertiveness and leadership, including motivation  .5 obtaining and maintaining situation awareness  Knowledge and ability to apply decision-making techniques:  .1 situation and risk assessment  .2 identify and generate options  .3 selecting course of action		Operations are planned and resources are allocated as needed in correct priority to perform necessary tasks  Communication is clearly and unambiguously given and received  Effective leadership behaviours are demonstrated  Necessary team member(s) share accurate understanding of current and predicted vessel state and

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Use of leadership and managerial skill (continued)	.4 evaluation of outcome effectiveness  Development, implementation, and oversight of standard operating procedures		operational status and external environment  Decisions are most effective for the situation  Operations are demonstrated to be effective and in accordance with applicable rules
Organize and manage the provision of medical care on board	A thorough knowledge of the use and contents of the following publications:  1 International Medical Guide for Ships or equivalent national publications  2 medical section of the International Code of Signals  3 Medical First Aid Guide for Use in Accidents Involving Dangerous Goods	Examination and assessment of evidence obtained from approved training	Actions taken and procedures followed correctly apply and make full use of advice available

<sup>\*</sup> The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

## Section A-II/3

Mandatory minimum requirements for certification of officers in charge of a navigational watch and of masters on ships of less than 500 gross tonnage, engaged on near-coastal voyages

## OFFICER IN CHARGE OF A NAVIGATIONAL WATCH

#### Standard of competence

- Every candidate for certification shall:
  - .1 be required to demonstrate the competence to undertake, at operational level, the tasks, duties and responsibilities listed in column 1 of table A-II/3;
  - at least hold the appropriate certificate for performing VHF radiocommunications in accordance with the requirements of the Radio Regulations; and
  - if designated to have primary responsibility for radiocommunications during distress incidents, hold the appropriate certificate issued or recognized under the provisions of the Radio Regulations.
- The minimum knowledge, understanding and proficiency required for certification is listed in column 2 of table A-II/3.
- The level of knowledge of the subjects listed in column 2 of table A-II/3 shall be sufficient to enable the candidate to serve in the capacity of officer in charge of a navigational watch.
- 4 Training and experience to achieve the necessary level of theoretical knowledge, understanding and proficiency shall be based on section A-VIII/2, part 4-1 Principles to be observed in keeping a navigational watch, and shall also take into account the relevant requirements of this part and the guidance given in part B of this Code.
- Every candidate for certification shall be required to provide evidence of having achieved the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-II/3.

#### Special training

- Every candidate for certification as officer in charge of a navigational watch on ships of less than 500 gross tonnage, engaged on near-coastal voyages, who, in accordance with paragraph 4.2.1 of regulation II/3, is required to have completed special training, shall follow an approved programme of onboard training which:
  - ensures that, during the required period of seagoing service, the candidate receives systematic practical training and experience in the tasks, duties and responsibilities of an officer in charge of a navigational watch, taking into account the guidance given in section B-II/1 of this Code;
  - .2 is closely supervised and monitored by qualified officers on board the ships in which the approved seagoing service is performed; and
  - is adequately documented in a training record book or similar document.

The relevant IMO Model Course(s) and a similar document produced by the International Shipping Federation may be of assistance in the preparation of training record books.

#### MASTER

Percentification as master on ships of less than 500 gross tonnage, engaged on near-coastal voyages, shall meet the requirements for an officer in charge of a navigational watch set out below and, in addition, shall be required to provide evidence of knowledge and ability to carry out all the duties of such a master.

## Table A-II/3

Specification of minimum standard of competence for officers in charge of a navigational watch and for masters on ships of less than 500 gross tonnage engaged on near-coastal voyages

Function: Navigation at the operational level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Plan and conduct a coastal passage and determine position  Note: Training and assessment in the use of ECDIS is not required for those who serve exclusively on ships not fitted with ECDIS. These limitations shall be	Navigation  Ability to determine the ship's position by the use of:  1 landmarks  2 aids to navigation, including lighthouses, beacons and buoys  3 dead reckoning, taking	Examination and assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 approved training ship experience  .3 approved simulator	Information obtained from nautical charts and publications is relevant, interpreted correctly and properly applied  The primary method of fixing the ship's position is the most appropriate to the prevailing circumstances and conditions  The position is determined
reflected in the endorsement issued to the seafarer concerned	into account winds, tides, currents and estimated speed	training, where appropriate	within the limits of acceptable instrument/system errors
		4 approved laboratory equipment training using: chart catalogues, charts, nautical publications, radio navigational warnings, sextant, azimuth mirror, electronic navigation	The reliability of the information obtained from the primary method of position fixing is checked at appropriate intervals  Calculations and measurements of navigational information are accurate
	Thorough knowledge of and ability to use nautical charts and publications, such as sailing directions, tide tables, notices to mariners, radio navigational warnings and ships' routeing information  Reporting in accordance	equipment, echo-sounding equipment, compass	Charts and publications selected are the largest scale on board suitable for the area of navigation and charts are corrected in accordance with the latest information available
	with General Principles for Ship Reporting Systems and with VTS procedures  Note: This item is only required for certification as master		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Plan and conduct a coastal passage and determine position (continued)	Voyage planning and navigation for all conditions by acceptable methods of plotting coastal tracks, taking into account, e.g.:  1 restricted waters 2 meteorological conditions 3 ice 4 restricted visibility 5 traffic separation schemes 6 vessel traffic service		
	.7 areas of extensive tidal effects  Note: This item is only required for certification as master  Thorough knowledge of and ability to use ECDIS	Examination and assessment of evidence obtained from one or more of the following:  I approved training ship experience  2 approved ECDIS simulator training	

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Plan and conduct a coastal passage and determine position (continued)	Navigational aids and equipment  Ability to operate safely and determine the ship's position by use of all navigational aids and equipment commonly fitted on board the ships concerned	Assessment of evidence obtained from approved radar simulator	Performance checks and tests of navigation systems comply with manufacturer's recommendations, good navigational practice and IMO resolutions on performance standards for navigational equipment  Interpretation and analysis of
			information obtained from radar is in accordance with accepted navigational practice and takes account of the limits and accuracy levels of radar
	Compasses  Knowledge of the errors and corrections of magnetic compasses		Errors in magnetic compasses are determined and applied correctly to courses and bearings
	Ability to determine errors of the compass, using terrestrial means, and to allow for such errors		
	Automatic pilot  Knowledge of automatic pilot systems and procedures; change-over from manual to automatic control and vice versa; adjustment of controls for optimum performance		Selection of the mode of steering is the most suitable for prevailing weather, sea and traffic conditions and intended manoeuvres
	Meteorology  Ability to use and interpret information obtained from shipborne meteorological instruments		Measurements and observations of weather conditions are accurate and appropriate to the passage
	Knowledge of the characteristics of the various weather systems, reporting procedures and recording systems		
	Ability to apply the meteorological information available		Meteorological information is evaluated and applied to maintain the safe passage of the vessel

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Maintain a safe navigational watch	Watchkeeping Thorough knowledge of content, application and intent of the International Regulations for Preventing Collisions at Sea, 1972, as amended Knowledge of content of the Principles to be observed in keeping a navigational watch Use of routeing in accordance with the General Provisions on Ships' Routeing Use of reporting in accordance with the General Principles for Ship Reporting Systems and with VTS procedures	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate 4 approved laboratory equipment training	The conduct, handover and relief of the watch conforms with accepted principles and procedures  A proper look-out is maintained at all times and in conformity with accepted principles and procedures  Lights, shapes and sound signals conform with the requirements contained in the International Regulations for Preventing Collisions at Sea, 1972, as amended and are correctly recognized  The frequency and extent of monitoring of traffic, the ship and the environment conform with accepted principles and procedures  Action to avoid close encounters and collision with other vessels is in accordance with the International Regulations for Preventing Collisions at Sea, 1972, as amended  Decisions to adjust course and/or speed are both timely and in accordance with accepted navigation procedures  A proper record is maintained of movements and activities relating to the navigation of the ship  Responsibility for safe navigation is clearly defined at all times, including periods when the master is on the bridge and when under pilotage

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Respond to emergencies	Emergency procedures, including:  1 precautions for the protection and safety of passengers in emergency situations  2 initial assessment of damage and damage control  3 action to be taken following a collision  4 action to be taken following a grounding  In addition, the following material should be included for certification as master:  1 emergency steering  2 arrangements for towing and for being taken in tow  3 rescuing persons from the sea  4 assisting a vessel in distress  5 appreciation of the action to be taken when emergencies arise in port	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate 4 practical instruction	The type and scale of the emergency is promptly identified  Initial actions and, if appropriate, manoeuvring are in accordance with contingency plans and are appropriate to the urgency of the situation and the nature of the emergency
Respond to a distress signal at sea	Search and rescue  Knowledge of the contents of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual	Examination and assessment of evidence obtained from practical instruction or approved simulator training, where appropriate	The distress or emergency signal is immediately recognized  Contingency plans and instructions in standing orders are implemented and complied with

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Manoeuvre the ship and operate small ship power plants	Ship manoeuvring and handling  Knowledge of factors affecting safe manoeuvring and handling  The operation of small ship power plants and auxiliaries  Proper procedures for anchoring and mooring	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate	Safe operating limits of ship propulsion, steering and power systems are not exceeded in normal manoeuvres  Adjustments made to the ship's course and speed maintain safety of navigation  Plant, auxiliary machinery and equipment is operated in accordance with technical specifications and within safe operating limits at all times

Function: Cargo handling and stowage at the operational level

Column 1	. Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Monitor the loading, stowage, securing and unloading of cargoes and their care during the	Cargo handling, stowage and securing  Knowledge of safe handling, stowage and securing of cargoes, including dangerous, hazardous and harmful cargoes, and their effect on	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience	Cargo operations are carried out in accordance with the cargo plan or other documents and established safety rules/regulations, equipment operating instructions and shipboard stowage limitations
voyage	the safety of life and of the ship  Use of the International Maritime Dangerous Goods	.2 approved training ship experience .3 approved simulator training, where	The handling of dangerous, hazardous and harmful cargoes complies with international regulations and recognized standards and codes of safe
	(IMDG) Code	appropriate	practice

## Function: Controlling the operation of the ship and care for persons on board at the operational level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Ensure compliance with pollution- prevention requirements	Prevention of pollution of the marine environment and anti-pollution procedures  Knowledge of the precautions to be taken to prevent pollution of the marine environment  Anti-pollution procedures and all associated equipment	Examination and assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 approved training ship experience	Procedures for monitoring shipboard operations and ensuring compliance with MARPOL requirements are fully observed

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Maintain seaworthiness of the ship	Ship stability  Working knowledge and application of stability, trim and stress tables, diagrams and stress-calculating equipment  Understanding of fundamental actions to be taken in the event of partial loss of intact buoyancy  Understanding of the fundamentals of watertight integrity  Ship construction  General knowledge of the principal structural members of a ship and the proper names for the various parts	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate 4 approved laboratory equipment training	The stability conditions comply with the IMO intact stability criteria under all conditions of loading  Actions to ensure and maintain the watertight integrity of the ship are in accordance with accepted practice
Prevent, control and fight fires on board	Fire prevention and fire-fighting appliances  Ability to organize fire drills  Knowledge of classes and chemistry of fire  Knowledge of fire-fighting systems  Understanding of action to be taken in the event of fire, including fires involving oil systems	Assessment of evidence obtained from approved fire-fighting training and experience as set out in section A-VI/3	The type and scale of the problem is promptly identified and initial actions conform with the emergency procedure and contingency plans for the ship  Evacuation, emergency shutdown and isolation procedures are appropriate to the nature of the emergency and are implemented promptly  The order of priority, and the levels and time-scales of making reports and informing personnel on board, are relevant to the nature of the emergency and reflect the urgency of the problem

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Operate life-saving appliances	Ability to organize abandon ship drills and knowledge of the operation of survival craft and rescue boats, their launching appliances and arrangements, and their equipment, including radio life-saving appliances, satellite EPIRBs, SARTs, immersion suits and thermal protective aids	Assessment of evidence obtained from approved training and experience as set out in section A-VI/2, paragraphs 1 to 4	Actions in responding to abandon ship and survival situations are appropriate to the prevailing circumstances and conditions and comply with accepted safety practices and standards
Apply medical first aid on board ship	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	Assessment of evidence obtained from approved training as set out in section A-VI/4, paragraphs 1 to 3	The identification of probable cause, nature and extent of injuries or conditions is prompt and treatment minimizes immediate threat to life
Monitor compliance with legislative requirements	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment	Assessment of evidence obtained from examination or approved training	Legislative requirements relating to safety of life at sea, security and protection of the marine environment are correctly identified
Contribute to the safety of personnel and ship	Knowledge of personal survival techniques  Knowledge of fire prevention and ability to fight and extinguish fires  Knowledge of elementary first aid  Knowledge of personal safety and social responsibilities	Assessment of evidence obtained from approved training and experiences as set out in section A-VI/I, paragraph 2	Appropriate safety and protective equipment is correctly used  Procedures and safe working practices designed to safeguard personnel and the ship are observed at all times  Procedures designed to safeguard the environment are observed at all times  Initial and follow-up actions on becoming aware of an emergency conform with established emergency response procedures

#### Section A-II/4

Mandatory minimum requirements for certification of ratings forming part of a navigational watch

#### Standard of competence

- 1 Every rating forming part of a navigational watch on a seagoing ship of 500 gross tonnage or more shall be required to demonstrate the competence to perform the navigation function at the support level, as specified in column 1 of table A-II/4.
- The minimum knowledge, understanding and proficiency required of ratings forming part of a navigational watch on a seagoing ship of 500 gross tonnage or more is listed in column 2 of table A-II/4.
- Every candidate for certification shall be required to provide evidence of having achieved the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence specified in columns 3 and 4 of table A-II/4. The reference to "practical test" in column 3 may include approved shore-based training in which the trainees undergo practical testing.
- Where there are no tables of competence for the support level in respect to certain functions, it remains the responsibility of the Administration to determine the appropriate training, assessment and certification requirements to be applied to personnel designated to perform those functions at the support level.

# Table A-II/4 Specification of minimum standard of competence for ratings forming part of a navigational watch

Function: Navigation at the support level

- Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Steer the ship and also comply with helm orders in the English language	Use of magnetic and gyro-compasses  Helm orders  Change-over from automatic pilot to hand steering and vice versa	Assessment of evidence obtained from:  1 practical test, or 2 approved in-service experience, or 3 approved training ship experience	A steady course is steered within acceptable limits, having regard to the area of navigation and prevailing sea state. Alterations of course are smooth and controlled  Communications are clear and concise at all times and orders are acknowledged in a seamanlike manner
Keep a proper look-out by sight and hearing	Responsibilities of a look-out, including reporting the approximate bearing of a sound signal, light or other object in degrees or points	Assessment of evidence obtained from:  1 practical test, or  2 approved in-service experience, or  3 approved training ship experience	Sound signals, lights and other objects are promptly detected and their approximate bearing, in degrees or points, is reported to the officer of the watch
Contribute to monitoring and controlling a safe watch	Shipboard terms and definitions  Use of appropriate internal communication and alarm systems  Ability to understand orders and to communicate with the officer of the watch on matters relevant to watchkeeping duties  Procedures for the relief, maintenance and handover of a watch  Information required to maintain a safe watch	Assessment of evidence obtained from approved in-service experience or approved training ship experience	Communications are clear and concise and advice/clarification is sought from the officer on watch where watch information or instructions are not clearly understood  Maintenance, handover and relief of the watch is in conformity with accepted practices and procedures
	Basic environmental protection procedures		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Operate emergency equipment and apply emergency procedures	Knowledge of emergency duties and alarm signals Knowledge of pyrotechnic distress signals; satellite EPIRBs and SARTs Avoidance of false distress alerts and action to be taken in event of accidental activation	Assessment of evidence obtained from demonstration and approved in-service experience or approved training ship experience	Initial action on becoming aware of an emergency or abnormal situation is in conformity with established practices and procedures  Communications are clear and concise at all times and orders are acknowledged in a seamanlike manner  The integrity of emergency and distress alerting systems is maintained at all times

#### Section A-II/5

Mandatory minimum requirements for certification of ratings as able seafarer deck

### Standard of competence

- Every able seafarer deck serving on a seagoing ship of 500 gross tonnage or more shall be required to demonstrate the competence to perform the functions at the support level, as specified in column 1 of table A-II/5.
- The minimum knowledge, understanding and proficiency required of an able seafarer deck serving on a seagoing ship of 500 gross tonnage or more is listed in column 2 of table A-II/5.
- Bevery candidate for certification shall be required to provide evidence of having achieved the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence specified in columns 3 and 4 of table A-II/5.

 ${\it Table~A-II/5}$  Specification of minimum standards of competence of ratings as able seafarer deck

Function: Navigation at the support level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to a safe navigational watch	Ability to understand orders and to communicate with the officer of the watch on matters relevant to watchkeeping duties  Procedures for the relief, maintenance and handover of a watch  Information required to maintain a safe watch	Assessment of evidence obtained from in-service experience or practical test	Communications are clear and concise  Maintenance, handover and relief of the watch is in conformity with acceptable practices and procedures
Contribute to berthing, anchoring and other mooring operations	Working knowledge of the mooring system and related procedures, including:  1 the function of mooring and tug lines and how each line functions as part of an overall system  2 the capacities, safe working loads, and breaking strengths of mooring equipment, including mooring wires, synthetic and fibre lines, winches, anchor windlasses, capstans, bitts, chocks and bollards  3 the procedures and order of events for making fast and letting go mooring and tug lines and wires, including towing lines  4 the procedures and order of events for the use of anchors in various operations  Working knowledge of the procedures and order of events associated with mooring to a buoy or buoys	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 practical training 3 examination 4 approved training ship experience 5 approved simulator training, where appropriate	Operations are carried out in accordance with established safety practices and equipment operating instructions

Function: Cargo handling and stowage at the support level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to the handling of cargo and stores	Knowledge of procedures for safe handling, stowage and securing of cargoes and stores, including dangerous, hazardous and harmful substances and liquids  Basic knowledge of and precautions to observe in connection with particular types of cargo and identification of IMDG labelling	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience  2 practical training  3 examination  4 approved training ship experience  5 approved simulator training, where appropriate	Cargo and stores operations are carried out in accordance with established safety procedures and equipment operating instructions  The handling of dangerous, hazardous and harmful cargoes or stores complies with established safety practices

Function: Controlling the operation of the ship and care for persons on board at the support level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to the safe operation of deck equipment and machinery	Knowledge of deck equipment, including:  1 function and uses of valves and pumps, hoists, cranes, booms, and related equipment  2 function and uses of winches, windlasses, capstans and related equipment  3 hatches, watertight doors, ports, and related equipment	experience  .2 practical training  .3 examination  .4 approved training ship experience	Operations are carried out in accordance with established safety practices and equipment operating instructions

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to the safe operation of deck equipment and machinery (continued)	.4 fibre and wire ropes, cables and chains, including their construction, use, markings, maintenance and proper stowage		-
	.5 ability to use and understand basic signals for the operation of equipment, including winches, windlasses, cranes, and hoists	Assessment of evidence obtained from practical demonstration	Communications within the operator's area of responsibility are consistently successful
	.6 ability to operate anchoring equipment under various conditions, such as anchoring, weighing anchor, securing for sea, and in emergencies	Assessment of evidence obtained from practical demonstration	Equipment operation is safely carried out in accordance with established procedures
	Knowledge of the following procedures and ability to:		-
	.1 rig and unrig bosun's chairs and staging .2 rig and unrig pilot	Assessment of evidence obtained from practical demonstration	Demonstrate the proper methods for rigging and unrigging in accordance with safe industry practice
	ladders, hoists, rat-guards and gangways	,	
	.3 use marlin spike seamanship skills, including the proper use of knots, splices and stoppers		Demonstrate the proper creation and use of knots, splices, stoppers, whippings, servings as well as proper canvas handling
	Use and handling of deck and cargo-handling gear and equipment:		
, ,	.1 access arrangements, hatches and hatch covers, ramps, side/bow/stern- doors or elevators		
	.2 pipeline systems – bilge and ballast suctions and wells		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to the safe operation of deck equipment and machinery (continued)	.3 cranes, derricks, winches Knowledge of hoisting and dipping flags and the main single-flag signals. (A, B, G, H, O, P, Q)		Demonstrate the proper use of blocks and tackle  Demonstrate the proper methods for handling lines, wires, cables and chains
Apply occupational health and safety precautions	Working knowledge of safe working practices and personal shipboard safety including:  1 working aloft 2 working over the side 3 working in enclosed spaces 4 permit to work systems 5 line handling 6 lifting techniques and methods of preventing back injury 7 electrical safety 8 mechanical safety 9 chemical and biohazard safety 10 personal safety equipment	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 practical training 3 examination 4 approved training ship experience	Procedures designed to safeguard personnel and the ship are observed at all times  Safe working practices are observed and appropriate safety and protective equipment is correctly used at all times
Apply precautions and contribute to the prevention of pollution of the marine environment	Knowledge of the precautions to be taken to prevent pollution of the marine environment  Knowledge of the use and operation of anti-pollution equipment  Knowledge of the approved methods for disposal of marine pollutants	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 practical training 3 examination 4 approved training ship experience	Procedures designed to safeguard the marine environment are observed at all times

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Operate survival craft and rescue boats	Knowledge of the operation of survival craft and rescue boats, their launching appliances and arrangements, and their equipment  Knowledge of survival at sea techniques	Assessment of evidence obtained from approved training and experience as set out in section A-VI/2, paragraphs 1 to 4	Actions in responding to abandon ship and survival situations are appropriate to the prevailing circumstances and conditions and comply with accepted safety practices and standards

Function: Maintenance and repair at the support level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to shipboard maintenance and repair	Ability to use painting, lubrication and cleaning materials and equipment  Ability to understand and execute routine maintenance and repair procedures  Knowledge of surface preparation techniques  Understanding manufacturer's safety guidelines and shipboard instructions	Assessment of evidence obtained from practical demonstration  Assessment of evidence obtained from one or more of the following:  .1 approved in-service	Maintenance and repair activities are carried out in accordance with technical, safety and procedural specifications
-	Knowledge of safe disposal of waste materials	experience .2 practical training	
	Knowledge of the application, maintenance and use of hand and power tools	.3 examination .4 approved training	
		ship experience	

#### CHAPTER III

#### Standards regarding engine department

#### Section A-III/1

Mandatory minimum requirements for certification of officers in charge of an engineering watch in a manned engine-room or as designated duty engineers in a periodically unmanned engine-room

#### Training

The education and training required by paragraph 2.4 of regulation III/1 shall include training in mechanical and electrical workshop skills relevant to the duties of an engineer officer.

#### Onboard training

- Every candidate for certification as officer in charge of an engineering watch in a manned engine-room or as designated duty engineer in a periodically unmanned engine-room of ships powered by main propulsion machinery of 750 kW or more whose seagoing service, in accordance with paragraph 2.2 of regulation III/1, forms part of a training programme approved as meeting the requirements of this section shall follow an approved programme of onboard training which:
  - ensures that, during the required period of seagoing service, the candidate receives systematic practical training and experience in the tasks, duties and responsibilities of an officer in charge of an engine-room watch, taking into account the guidance given in section B-III/1 of this Code;
  - .2 is closely supervised and monitored by a qualified and certificated engineer officer aboard the ships in which the approved seagoing service is performed; and
  - .3 is adequately documented in a training record book.

#### Standard of competence

- Byery candidate for certification as officer in charge of an engineering watch in a manned engine-room or as designated duty engineer in a periodically unmanned engine-room on a seagoing ship powered by main propulsion machinery of 750 kW propulsion power or more shall be required to demonstrate ability to undertake, at the operational level, the tasks, duties and responsibilities listed in column 1 of table A-III/1.
- 4 The minimum knowledge, understanding and proficiency required for certification is listed in column 2 of table A-III/1.
- The level of knowledge of the material listed in column 2 of table A-III/1 shall be sufficient for engineer officers to carry out their watchkeeping duties.\*

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

- Training and experience to achieve the necessary theoretical knowledge, understanding and proficiency shall be based on section A-VIII/2, part 4-2 Principles to be observed in keeping an engineering watch, and shall take into account the relevant requirements of this part and the guidance given in part B of this Code.
- Candidates for certification for service in ships in which steam boilers do not form part of their machinery may omit the relevant requirements of table A-III/I. 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 meets the standard of competence in the items omitted from table A-III/I. Any such limitation shall be stated on the certificate and in the endorsement.
- 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 knowledge requirements. Any such limitation shall be stated on the certificate and in the endorsement.
- Every candidate for certification shall be required to provide evidence of having achieved the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-III/1.

#### Near-coastal voyages

The requirements of paragraphs 2.2 to 2.5 of regulation III/1 relating to level of knowledge, understanding and proficiency required under the different sections listed in column 2 of table A-III/1 may be varied for engineer officers of ships powered by main propulsion machinery of less than 3,000 kW propulsion power engaged on near-coastal voyages, as considered necessary, bearing in mind the effect on the safety of all ships which may be operating in the same waters. Any such limitation shall be stated on the certificate and in the endorsement.

#### Table A-III/1

Specification of minimum standard of competence for officers in charge of an engineering watch in a manned engine-room or designated duty engineers in a periodically unmanned engine-room

Function: Marine engineering at the operational level

Column 1	Column 2	Column 3	Column 4
Сотретепсе	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Maintain a safe engineering watch	Thorough knowledge of Principles to be observed in keeping an engineering watch, including:  1 duties associated with taking over and accepting a watch  2 routine duties undertaken during a watch  3 maintenance of the machinery space logs and the significance of the readings taken  4 duties associated with handing over a watch  Safety and emergency procedures; change-over of remote/automatic to local control of all systems  Safety precautions to be observed during a watch and immediate actions to be taken in the event of fire or accident, with particular reference to oil systems	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate 4 approved laboratory equipment training	The conduct, handover and relief of the watch conforms with accepted principles and procedures  The frequency and extent of monitoring of engineering equipment and systems conforms to manufacturers' recommendations and accepted principles and procedures, including Principles to be observed in keeping an engineering watch  A proper record is maintained of the movements and activities relating to the ship's engineering systems

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Maintain a safe engineering watch (continued)	Engine-room resource management  Knowledge of engine-room resource management principles, including:  .1 allocation, assignment, and prioritization of resources  .2 effective communication  .3 assertiveness and leadership  .4 obtaining and maintaining situational awareness  .5 consideration of team experience	Assessment of evidence obtained from one or more of the following:  1 approved training 2 approved in-service experience 3 approved simulator training	Resources are allocated and assigned as needed in correct priority to perform necessary tasks  Communication is clearly and unambiguously given and received  Questionable decisions and/or actions result in appropriate challenge and response  Effective leadership behaviours are identified  Team member(s) share accurate understanding of current and predicted engine-room and associated systems state, and of external environment
Use English in written and oral form	Adequate knowledge of the English language to enable the officer to use engineering publications and to perform engineering duties	Examination and assessment of evidence obtained from practical instruction	English language publications relevant to engineering duties are correctly interpreted  Communications are clear and understood
Use internal communication systems	Operation of all internal communication systems on board	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate 4 approved laboratory equipment training	Transmission and reception of messages are consistently successful  Communication records are complete, accurate and comply with statutory requirements

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Operate main and auxiliary machinery and associated control systems	Basic construction and operation principles of machinery systems, including:  1 marine diesel engine 2 marine steam turbine 3 marine gas turbine	Examination and assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 approved training	Construction and operating mechanisms can be understood and explained with drawings/instructions
	<ul> <li>.4 marine boiler</li> <li>.5 shafting installations, including propeller</li> <li>.6 other auxiliaries, including various pumps, air compressor, purifier, fresh water generator, heat exchanger, refrigeration, air-conditioning and ventilation systems</li> </ul>	ship experience  3 approved laboratory equipment training	
	.7 steering gear  .8 automatic control systems  .9 fluid flow and characteristics of lubricating oil, fuel oil and cooling systems  .10 deck machinery  Safety and emergency procedures for operation of propulsion plant machinery, including control systems		

Competence   Knowledge, understanding and proficiency   Criteria for evaluating competence	Column 1	Column 2	Column 3	Column 4
auxiliary machinery and associated control systems (continued)  I main engine and associated auxiliaries  I main engine and associated auxiliaries and control systems  2 steam boiler and associated auxiliaries and steam systems  3 auxiliary prime movers and associated auxiliaries, including refrigeration, airconditioning and ventilation systems  4 other auxiliaries, including refrigeration, airconditioning and ventilation systems  Operate fuel, lubrication, ballast and other pumping systems  Operation of pumping systems:  1 routine pumping operations systems  Olly-water separators  detection and necessary measures to prevent damage for the following: machinery ideas and cordance with operating on more of the following: approved in-service experience  assessment of evidence of the following: approved in-service experience  assessment of evidence of the following: approved in-service experience  2 approved training ship experience  approved training, where appropriate  approved training ship experience  approved training ship experience  The output of plant and engineering systems consistently meets requirements, including bridge orders relating to changes in speed and direction are promptly identified and actions are only identified and actions from the norm are promptly ident	Competence	1	demonstrating	Criteria for evaluating competence
lubrication, ballast and other pumping systems and associated control systems  Operation of pumping systems:  1 routine pumping operations  2 operation of bilge, ballast and cargo pumping systems  Oily-water separators  Operation of high systems and assessment of evidence obtained from one or more of the following:  assessment of evidence obtained from one or more of the following:  1 approved in-service experience  2 approved training ship experience  3 approved simulator training, where  Oily-water separators  Operation of pumping systems  2 operation of bilge, ballast and carried out in accordance with operating manuals, established rules and procedures to ensure safety of operations and avoid pollution of the marine environment  Oily-water separators  Operation of pumping systems  1 approved in-service experience  2 approved training ship experience  Obtained from one or more of the following:  2 approved in-service experience  3 approved simulator training, where	auxiliary machinery and associated control systems	detection and necessary measures to prevent damage for the following machinery items and control systems:  1 main engine and associated auxiliaries  2 steam boiler and associated auxiliaries and steam systems  3 auxiliary prime movers and associated systems  4 other auxiliaries, including refrigeration, air- conditioning and ventilation	assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 approved training ship experience  .3 approved simulator training, where appropriate  .4 approved laboratory	accordance with operating manuals, established rules and procedures to ensure safety of operations and avoid pollution of the marine environment  Deviations from the norm are promptly identified  The output of plant and engineering systems consistently meets requirements, including bridge orders relating to changes in speed and direction  The causes of machinery malfunctions are promptly identified and actions are designed to ensure the overall safety of the ship and the plant, having regard to the prevailing circumstances and
requirements and operation  .4 approved laboratory equipment training	lubrication, ballast and other pumping systems and associated control	pumps and piping systems, including control systems  Operation of pumping systems:  1 routine pumping operations 2 operation of bilge, ballast and cargo pumping systems  Oily-water separators (or-similar equipment)	assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate 4 approved laboratory	accordance with operating manuals, established rules and procedures to ensure safety of operations and avoid pollution of the marine environment  Deviations from the norm are promptly identified and appropriate action is

Function: Electrical, electronic and control engineering at the operational level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Operate electrical, electronic and control systems	Basic configuration and operation principles of the following electrical, electronic and control equipment:  1 electrical equipment: 2 generator and distribution systems 3 preparing, starting, paralleling and changing over generators 3 celectrical motors including starting methodologies 4 high-voltage installations 5 sequential control circuits and associated system devices 5 electronic equipment: 5 characteristics of basic electronic circuit elements 6 flowchart for automatic and control systems 7 functions, characteristics and features of control systems for machinery items, including main propulsion plant operation control and steam boiler automatic controls  3 control systems: 5 a various automatic control methodologies and characteristics 6 Proportional—Integral—Derivative (PID) control characteristics and associated system devices for process control	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate 4 approved laboratory equipment training	Operations are planned and carried out in accordance with operating manuals, established rules and procedures to ensure safety of operations  Electrical, electronic and control systems can be understood and explained with drawings/instructions

Column 1	Column 2	Column 3	Column 4
Сотретенсе	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Maintenance and repair of electrical and electronic equipment	Safety requirements for working on shipboard electrical systems, including the safe isolation of electrical equipment required before personnel are permitted to work on such equipment  Maintenance and repair of electrical system equipment, switchboards, electric motors, generator and DC electrical systems and equipment  Detection of electric malfunction, location of faults and measures to prevent damage  Construction and operation of electrical testing and measuring equipment  Function and performance tests of the following equipment and their configuration:  1 monitoring systems  2 automatic control devices  The interpretation of electrical and simple electronic diagrams	Examination and assessment of evidence obtained from one or more of the following:  1 approved workshop skills training  2 approved practical experience and tests  3 approved in-service experience  4 approved training ship experience	Safety measures for working are appropriate  Selection and use of hand tools, measuring instruments, and testing equipment are appropriate and interpretation of results is accurate  Dismantling, inspecting, repairing and reassembling equipment are in accordance with manuals and good practice  Reassembling and performance testing is in accordance with manuals and good practice

Function: Maintenance and repair at the operational level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Appropriate use of hand tools, machine tools and measuring instruments for fabrication and repair on board	Characteristics and limitations of materials used in construction and repair of ships and equipment  Characteristics and limitations of processes used for fabrication and repair  Properties and parameters considered in the fabrication and repair of systems and components  Methods for carrying out safe emergency/temporary repairs  Safety measures to be taken to ensure a safe working environment and for using hand tools, machine tools and measuring instruments  Use of hand tools, machine tools and measuring instruments  Use of various types of sealants and packings	Assessment of evidence obtained from one or more of the following:  1 approved workshop skills training  2 approved practical experience and tests  3 approved in-service experience  4 approved training ship experience	Identification of important parameters for fabrication of typical ship-related components is appropriate  Selection of materials is appropriate  Fabrication is to designated tolerances  Use of equipment and hand tools, machine tools and measuring instruments is appropriate and safe
Maintenance and repair of shipboard machinery and equipment	Safety measures to be taken for repair and maintenance, including the safe isolation of shipboard machinery and equipment required before personnel are permitted to work on such machinery or equipment  Appropriate basic mechanical knowledge and skills	Examination and assessment of evidence obtained from one or more of the following:  1 approved workshop skills training  2 approved practical experience and tests  3 approved in-service experience	Safety procedures followed are appropriate Selection of tools and spare gear is appropriate

Column 1	Column 2		Column 3	Column 4
Competence	Knowledge, understanding and proficiency		Methods for demonstrating competence	Criteria for evaluating competence
Maintenance and repair of shipboard machinery and equipment (continued)	Maintenance and repair, such as dismantling, adjustment and reassembling of machinery and equipment  The use of appropriate specialized tools and measuring instruments  Design characteristics and selection of materials in construction of equipment  Interpretation of machinery drawings and handbooks  The interpretation of piping, hydraulic and pneumatic diagrams	.4	approved training ship experience	Dismantling, inspecting, repairing and reassembling equipment is in accordance with manuals and good practice  Re-commissioning and performance testing is in accordance with manuals and good practice  Selection of materials and parts is appropriate

Function: Controlling the operation of the ship and care for persons on board at the operational level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Ensure compliance with pollution-prevention requirements	Prevention of pollution of the marine environment  Knowledge of the precautions to be taken to prevent pollution of the marine environment  Anti-pollution procedures and all associated equipment  Importance of proactive measures to protect the marine environment	Examination and assessment of evidence obtained from one or more of the following:  .1 approved in-service experience .2 approved training ship experience .3 approved training	Procedures for monitoring shipboard operations and ensuring compliance with MARPOL requirements are fully observed  Actions to ensure that a positive environmental reputation is maintained

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Maintain seaworthiness of the ship	Ship stability  Working knowledge and application of stability, trim and stress tables, diagrams and stress-calculating equipment  Understanding of the fundamentals of watertight integrity  Understanding of fundamental actions to be taken in the event of partial loss of intact buoyancy  Ship construction  General knowledge of the principal structural members of a ship and the proper names for the various parts	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate 4 approved laboratory equipment training	The stability conditions comply with the IMO intact stability criteria under all conditions of loading  Actions to ensure and maintain the watertight integrity of the ship are in accordance with accepted practice
	Fire prevention and fire-fighting appliances  Ability to organize fire drills  Knowledge of classes and chemistry of fire  Knowledge of fire-fighting systems  Action to be taken in the event of fire, including fires involving oil systems	Assessment of evidence obtained from approved fire-fighting training and experience as set out in section A-VI/3, paragraphs 1 to 3	The type and scale of the problem is promptly identified and initial actions conform with the emergency procedure and contingency plans for the ship  Evacuation, emergency shutdown and isolation procedures are appropriate to the nature of the emergency and are implemented promptly  The order of priority, and the levels and time-scales of making reports and informing personnel on board, are relevant to the nature of the emergency and reflect the urgency of the problem

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Operate life-saving appliances	Life-saving  Ability to organize abandon ship drills and knowledge of the operation of survival craft and rescue boats, their launching appliances and arrangements, and their equipment, including radio life-saving appliances, satellite EPIRBs, SARTs, immersion suits and thermal protective aids	Assessment of evidence obtained from approved training and experience as set out in section A-VI/2, paragraphs 1 to 4	Actions in responding to abandon ship and survival situations are appropriate to the prevailing circumstances and conditions and comply with accepted safety practices and standards
Apply medical first aid on board ship	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	Assessment of evidence obtained from approved training as set out in section A-VI/4, paragraphs 1 to 3	Identification of probable cause, nature and extent of injuries or conditions is prompt and treatment minimizes immediate threat to life
Monitor compliance with legislative requirements	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment	Assessment of evidence obtained from examination or approved training	Legislative requirements relating to safety of life at sea, security and protection of the marine environment are correctly identified
Application of leadership and teamworking skills	Working knowledge of shipboard personnel management and training  A knowledge of related international maritime conventions and recommendations, and national legislation  Ability to apply task and workload management, including:  1 planning and coordination  2 personnel assignment  3 time and resource constraints  4 prioritization	Assessment of evidence obtained from one or more of the following:  1 approved training 2 approved in-service experience 3 practical demonstration	The crew are allocated duties and informed of expected standards of work and behaviour in a manner appropriate to the individuals concerned  Training objectives and activities are based on assessment of current competence and capabilities and operational requirements.  Operations are demonstrated to be in accordance with applicable rules

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Application of leadership and teamworking skills (continued)	Knowledge and ability to apply effective resource management:  1 allocation, assignment, and prioritization of resources  2 effective communication on board and ashore  3 decisions reflect consideration of team experiences  4 assertiveness and leadership, including motivation  5 obtaining and maintaining situational awareness  Knowledge and ability to apply decision-making techniques:  1 situation and risk assessment  2 identify and consider generated options  3 selecting course of action  4 evaluation of outcome effectiveness		Operations are planned and resources are allocated as needed in correct priority to perform necessary tasks  Communication is clearly and unambiguously given and received  Effective leadership behaviours are demonstrated  Necessary team member(s) share accurate understanding of current and predicted vessel state and operational status and external environment  Decisions are most effective for the situation

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to the safety of personnel and ship	Knowledge of personal survival techniques  Knowledge of fire prevention and ability to fight and extinguish fires  Knowledge of elementary first aid  Knowledge of personal safety and social responsibilities	Assessment of evidence obtained from approved training and experience as set out in section A-VI/1, paragraph 2	Appropriate safety and protective equipment is correctly used  Procedures and safe working practices designed to safeguard personnel and the ship are observed at all times  Procedures designed to safeguard the environment are observed at all times  Initial and follow-up actions on becoming aware of an emergency conform with established emergency response procedures

#### Section A-III/2

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

#### Standard of competence

- Every candidate for certification as chief engineer officer and second engineer officer of seagoing ships powered by main propulsion machinery of 3,000 kW power or more shall be required to demonstrate ability to undertake, at the management level, the tasks, duties and responsibilities listed in column 1 of table A-III/2.
- 2 The minimum knowledge, understanding and proficiency required for certification is listed in column 2 of table A-III/2. This incorporates, expands and extends in depth the subjects listed in column 2 of table A-III/1 for officers in charge of an engineering watch.
- 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, assessment 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 and the protection of the marine environment.
- 4 The level of knowledge of the subjects listed in column 2 of table A-III/2 shall be sufficient to enable the candidate to serve in the capacity of chief engineer officer or second engineer officer.\*
- 5 Training and experience to achieve the necessary level of theoretical knowledge, understanding and proficiency shall take into account the relevant requirements of this part and the guidance given in part B of this Code.
- 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 knowledge requirements. Any such limitation shall be stated on the certificate and in the endorsement.
- Every candidate for certification shall be required to provide evidence of having achieved the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-III/2.

#### Near-coastal voyages

The level of knowledge, understanding and proficiency required under the different sections listed in column 2 of table A-III/2 may be varied for engineer officers of ships powered by main propulsion machinery with limited propulsion power engaged on near-coastal voyages, as considered necessary, bearing in mind the effect on the safety of all ships which may be operating in the same waters. Any such limitation shall be stated on the certificate and in the endorsement.

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

#### Table A-III/2

Specification of minimum standard of competence for chief engineer officers and second engineer officers on ships powered by main propulsion machinery of 3,000 kW propulsion power or more

Function: Marine engineering at the management level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Manage the operation of propulsion plant machinery	Design features, and operative mechanism of the following machinery and associated auxiliaries:  1 marine diesel engine 2 marine steam turbine 3 marine gas turbine 4 marine steam boiler	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate 4 approved laboratory equipment training	Explanation and understanding of design features and operating mechanisms are appropriate
Plan and schedule operations	Theoretical knowledge  Thermodynamics and heat transmission  Mechanics and hydromechanics  Propulsive characteristics of diesel engines, steam and gas turbines, including speed, output and fuel consumption  Heat cycle, thermal efficiency and heat balance of the following:  .1 marine diesel engine  .2 marine steam turbine  .3 marine gas turbine  .4 marine steam boiler	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate 4 approved laboratory equipment training	The planning and preparation of operations is suited to the design parameters of the power installation and to the requirements of the voyage

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Plan and schedule operations (continued)  Operation, surveillance,	Refrigerators and refrigeration cycle  Physical and chemical properties of fuels and lubricants  Technology of materials  Naval architecture and ship construction, including damage control  Practical knowledge	Examination and assessment of evidence	The methods of preparing for the start-up and of
performance assessment and maintaining safety of propulsion plant and auxiliary machinery	Start up and shut down main propulsion and auxiliary machinery, including associated systems  Operating limits of propulsion plant  The efficient operation, surveillance, performance assessment and maintaining safety of propulsion plant and auxiliary machinery  Functions and mechanism of automatic control for main engine  Functions and mechanism of automatic control for auxiliary machinery including but not limited to:  1 generator distribution systems  2 steam boilers  3 oil purifier  4 refrigeration system  5 pumping and piping systems  6 steering gear system  7 cargo-handling equipment and deck machinery	obtained from one or more of the following:  1 approved in-service experience  2 approved training ship experience  3 approved simulator training, where appropriate  4 approved laboratory equipment training	making available fuels, lubricants, cooling water and air are the most appropriate  Checks of pressures, temperatures and revolutions during the start-up and warm-up period are in accordance with technical specifications and agreed work plans  Surveillance of main propulsion plant and auxiliary systems is sufficient to maintain safe operating conditions  The methods of preparing the shutdown, and of supervising the cooling down of the engine are the most appropriate  The methods of measuring the load capacity of the engines are in accordance with technical specifications  Performance is checked against bridge orders  Performance levels are in accordance with technical specifications

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Manage fuel, lubrication and ballast operations	Operation and maintenance of machinery, including pumps and piping systems	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience  2 approved training ship experience  3 approved simulator training, where appropriate	Fuel and ballast operations meet operational requirements and are carried out so as to prevent pollution of the marine environment

Function: Electrical, electronic and control engineering at the management level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Manage operation of electrical and electronic control equipment	Marine electrotechnology, electronics, power electronics, automatic control engineering and safety devices  Design features and system configurations of automatic control equipment and safety devices for the following:  1 main engine 2 generator and distribution system 3 steam boiler  Design features and system configurations of operational control equipment for electrical motors  Design features of high-voltage installations  Features of hydraulic and pneumatic control equipment	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate 4 approved laboratory equipment training	Operation of equipment and system is in accordance with operating manuals  Performance levels are in accordance with technical specifications
Manage trouble-shooting, restoration of electrical and electronic control equipment to operating condition	Practical knowledge  Troubleshooting of electrical and electronic control equipment  Function test of electrical, electronic control equipment and safety devices  Troubleshooting of monitoring systems  Software version control	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience  2 approved training ship experience  3 approved simulator training, where appropriate  4 approved laboratory equipment training	Maintenance activities are correctly planned in accordance with technical, legislative, safety and procedural specifications  Inspection, testing and troubleshooting of equipment are appropriate

Function: Maintenance and repair at the management level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Manage safe and effective maintenance and repair procedures	Theoretical knowledge  Marine engineering practice  Practical knowledge  Manage safe and effective maintenance and repair procedures  Planning maintenance, including statutory and class verifications  Planning repairs	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience  2 approved training ship experience  3 approved workshop training	Maintenance activities are correctly planned and carried out in accordance with technical, legislative, safety and procedural specifications.  Appropriate plans, specifications, materials and equipment are available for maintenance and repair.  Action taken leads to the restoration of plant by the most suitable method
Detect and identify the cause of machinery malfunctions and correct faults	Practical knowledge  Detection of machinery malfunction, location of faults and action to prevent damage  Inspection and adjustment of equipment  Non-destructive examination	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate 4 approved laboratory equipment training	The methods of comparing actual operating conditions are in accordance with recommended practices and procedures  Actions and decisions are in accordance with recommended operating specifications and limitations
Ensure safe working practices	Practical knowledge Safe working practices	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved laboratory equipment training	Working practices are in accordance with legislative requirements, codes of practice, permits to work and environmental concerns

Function: Controlling the operation of the ship and care for persons on board at the management level

·Column 1	Column 2	Column 3	Column 4
Сотретелсе	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Control trim, stability and stress	Understanding of fundamental principles of ship construction and the theories and factors affecting trim and stability and measures necessary to preserve trim and stability  Knowledge of the effect on trim and stability of a ship in the event of damage to, and consequent flooding of, a compartment and countermeasures to be taken  Knowledge of IMO recommendations concerning ship stability	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate	Stability and stress conditions are maintained within safety limits at all times
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment	Knowledge of relevant international maritime law embodied in international agreements and conventions  Regard shall be paid especially to the following subjects:  1 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  2 responsibilities under the relevant requirements of the International Convention on Load Lines, 1966, as amended  3 responsibilities under the relevant requirements of the International Convention for the Safety of Life at Sea, 1974, as amended	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training, where appropriate	Procedures for monitoring operations and maintenance comply with legislative requirements  Potential non-compliance is promptly and fully identified  Requirements for renewal and extension of certificates ensure continued validity of survey items and equipment

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Monitor and control compliance with legislative requirements and	.4 responsibilities under the International Convention for the Prevention of Pollution from Ships, as amended	· · · · · · · · · · · · · · · · · · ·	
measures to ensure safety of life at sea and protection of the marine environment (continued)	.5 maritime declarations of health and the requirements of the International Health Regulations		,
(Commuea)	.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo		
	.7 methods and aids to prevent pollution of the environment by ships		
	.8 knowledge of national legislation for implementing international agreements and conventions		
Maintain safety and security of the vessel, crew and passengers and the operational condition of life-saving, fire-fighting and	A thorough knowledge of life-saving appliance regulations (International Convention for the Safety of Life at Sea)  Organization of fire and abandon ship drills	Examination and assessment of evidence obtained from practical instruction and approved in-service training and experience	Procedures for monitoring fire-detection and safety systems ensure that all alarms are detected promptly and acted upon in accordance with established emergency procedures
other safety systems	Maintenance of operational condition of life-saving, fire-fighting and other safety systems		
	Actions to be taken to protect and safeguard all persons on board in emergencies		
	Actions to limit damage and salve the ship following fire, explosion, collision or grounding		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Develop emergency and damage control plans and handle emergency situations	Ship construction, including damage control  Methods and aids for fire prevention, detection and extinction  Functions and use of life-saving appliances	Examination and assessment of evidence obtained from approved in-service training and experience	Emergency procedures are in accordance with the established plans for emergency situations
Use leadership and managerial skills	Knowledge of shipboard personnel management and training  A knowledge of international maritime conventions and recommendations, and related national legislation  Ability to apply task and workload management, including:  .1 planning and coordination  .2 personnel assignment  .3 time and resource constraints  .4 prioritization  Knowledge and ability to apply effective resource management:  .1 allocation, assignment, and prioritization of resources  .2 effective communication on board and ashore  .3 decisions reflect consideration of team experience	Assessment of evidence obtained from one or more of the following:  1 approved training 2 approved in-service experience 3 approved simulator training	The crew are allocated duties and informed of expected standards of work and behaviour in a manner appropriate to the individuals concerned  Training objectives and activities are based on assessment of current competence and capabilities and operational requirements  Operations are demonstrated to be in accordance with applicable rules  Operations are planned and resources are allocated as needed in correct priority to perform necessary tasks  Communication is clearly and unambiguously given and received

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Use leadership and managerial skills (continued)	.4 assertiveness and leadership, including motivation .5 obtaining and maintaining situation awareness  Knowledge and ability to apply decision-making techniques: .1 situation and risk assessment .2 identify and generate options .3 select course of action .4 evaluation of outcome effectiveness  Development, implementation, and oversight	competence	Effective leadership behaviours are demonstrated  Necessary team member(s) share accurate understanding of current and predicted vessel state and operational status and external environment  Decisions are most effective for the situation  Operations are demonstrated to be effective and in accordance with applicable rules
	of standard operating procedures		-

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

#### Standard of competence

- Every candidate for certification as chief engineer officer and second engineer officer of seagoing ships powered by main propulsion machinery of between 750 kW and 3,000 kW power shall be required to demonstrate ability to undertake, at management level, the tasks, duties and responsibilities listed in column 1 of table A-III/2.
- The minimum knowledge, understanding and proficiency required for certification is listed in column 2 of table A-III/2. This incorporates, expands and extends in depth the subjects listed in column 2 of table A-III/1 for officers in charge of an engineering watch in a manned engine-room or designated duty engineers in a periodically unmanned engine-room.
- 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, assessment 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 and the protection of the marine environment.
- 4 The level of knowledge of the subjects listed in column 2 of table A-III/2 may be lowered but shall be sufficient to enable the candidate to serve in the capacity of chief engineer officer or second engineer officer at the range of propulsion power specified in this section.
- 5 Training and experience to achieve the necessary level of theoretical knowledge, understanding and proficiency shall take into account the relevant requirements of this part and the guidance given in part B of this Code.
- 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 knowledge requirements. Any such limitation shall be stated on the certificate and in the endorsement.
- Every candidate for certification shall be required to provide evidence of having achieved the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-III/2.

#### Near-coastal voyages

The level of knowledge, understanding and proficiency required under the different sections listed in column 2 of table A-III/2 and the requirements of paragraphs 2.1.1 and 2.1.2 of regulation III/3 may be varied for engineer officers of ships powered by main propulsion machinery of less than 3,000 kW main propulsion power engaged on near-coastal voyages, as considered necessary, bearing in mind the effect on the safety of all ships which may be operating in the same waters. Any such limitation shall be stated on the certificate and in the endorsement.

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Mandatory minimum requirements for certification of ratings forming part of a watch in a manned engine-room or designated to perform duties in a periodically unmanned engine-room

- Every rating forming part of an engine-room watch on a seagoing ship shall be required to demonstrate the competence to perform the marine engineering function at the support level, as specified in column 1 of table A-III/4.
- The minimum knowledge, understanding and proficiency required of ratings forming part of an engine-room watch is listed in column 2 of table A-III/4.
- Every candidate for certification shall be required to provide evidence of having achieved the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence specified in columns 3 and 4 of table A-III/4. The reference to "practical test" in column 3 may include approved shore-based training in which the students undergo practical testing.
- Where there are no tables of competence for the support level with respect to certain functions, it remains the responsibility of the Administration to determine the appropriate training, assessment and certification requirements to be applied to personnel designated to perform those functions at the support level.

#### Table A-III/4

## Specification of minimum standard of competence for ratings forming part of an engineering watch

Function:

Marine engineering at the support level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Carry out a watch routine appropriate to the duties of a rating forming part of an engine-room watch  Understand orders and be understood in matters relevant to watchkeeping duties	Terms used in machinery spaces and names of machinery and equipment  Engine-room watchkeeping procedures  Safe working practices as related to engine-room operations  Basic environmental protection procedures  Use of appropriate internal communication system  Engine-room alarm systems	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience; 2 approved training ship experience; or 3 practical test	Communications are clear and concise and advice or clarification is sought from the officer of the watch where watch information or instructions are not clearly understood  Maintenance, handover and relief of the watch is in conformity with accepted principles and procedures
	and ability to distinguish between the various alarms, with special reference to fire-extinguishing gas alarms		
For keeping a boiler watch:  Maintain the correct water levels and	Safe operation of boilers	Assessment of evidence obtained from one or more of the following:  .1 approved in-service experience;	Assessment of boiler condition is accurate and based on relevant information available from local and remote indicators and physical inspections
pressures		2 approved training ship experience; 3 practical test; or	The sequence and timing of adjustments maintains safety and optimum efficiency
		.4 approved simulator training, where appropriate	

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Operate emergency equipment and apply emergency procedures	Knowledge of emergency duties  Escape routes from machinery spaces  Familiarity with the location and use of fire-fighting equipment in the machinery spaces	Assessment of evidence obtained from demonstration and approved in-service experience or approved training ship experience	Initial action on becoming aware of an emergency or abnormal situation conforms with established procedures  Communications are clear and concise at all times and orders are acknowledged in a seamanlike manner

Mandatory minimum requirements for certification of ratings as able seafarer engine in a manned engine-room or designated to perform duties in a periodically unmanned engine-room

- Every able seafarer engine serving on a seagoing ship powered by main propulsion machinery of 750 kW propulsion power or more shall be required to demonstrate the competence to perform the functions at the support level, as specified in column 1 of table A-III/5.
- The minimum knowledge, understanding and proficiency required of an able seafarer engine serving on a seagoing ship powered by main propulsion machinery of 750 kW propulsion power or more is listed in column 2 of table A-III/5.
- 3 Every candidate for certification shall be required to provide evidence of having achieved the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence specified in columns 3 and 4 of table A-III/5.

#### Table A-III/5

# Specification of minimum standard of competence for ratings as able seafarer engine in a manned engine-room or designated to perform duties in a periodically unmanned engine-room

Function: Marine engineering at the support level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to a safe engineering watch	Ability to understand orders and to communicate with the officer of the watch in matters relevant to watchkeeping duties  Procedures for the relief, maintenance and handover of a watch  Information required to maintain a safe watch	Assessment of evidence obtained from in-service experience or practical test	Communications are clear and concise  Maintenance, handover and relief of the watch is in conformity with acceptable practices and procedures
Contribute to the monitoring and controlling of an engine-room watch	Basic knowledge of the function and operation of main propulsion and auxiliary machinery  Basic understanding of main propulsion and auxiliary machinery control pressures, temperatures and levels	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience; 2 approved training ship experience; or 3 practical test	The frequency and extent of monitoring of main propulsion and auxiliary machinery conforms with accepted principles and procedures  Deviations from the norm are identified  Unsafe conditions or potential hazards are promptly recognized, reported and rectified before work continues
Contribute to fuelling and oil transfer operations	Knowledge of the function and operation of fuel system and oil transfer operations, including:  1 preparations for fuelling and transfer operations  2 procedures for connecting and disconnecting fuelling and transfer hoses	Assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 practical training  .3 examination  .4 approved training ship experience	Transfer operations are carried out in accordance with established safety practices and equipment operating instructions  The handling of dangerous, hazardous and harmful liquids complies with established safety practices  Communications within the operator's area of responsibility are consistently successful

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to fuelling and oil transfer operations (continued)	<ul> <li>.3 procedures relating to incidents that may arise during fuelling or transferring operation</li> <li>.4 securing from fuelling and transfer operations</li> <li>.5 ability to correctly measure and report tank levels</li> </ul>	Assessment of evidence obtained from practical demonstration	
Contribute to bilge and ballast operations	Knowledge of the safe function, operation and maintenance of the bilge and ballast systems, including:  1 reporting incidents associated with transfer operations 2 ability to correctly measure and report tank levels	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 practical training 3 examination 4 approved training ship experience  Assessment of evidence obtained from practical demonstration	Operations and maintenance are carried out in accordance with established safety practices and equipment operating instructions and pollution of the marine environment is avoided  Communications within the operator's area of responsibility are consistently successful
Contribute to the operation of equipment and machinery	Safe operation of equipment, including:  1 valves and pumps  2 hoists and lifting equipment  3 hatches, watertight doors, ports and related equipment  Ability to use and understand	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 practical training 3 examination 4 approved training ship experience Assessment of evidence	Operations are carried out in accordance with established safety practices and equipment operating instructions  Communications within the operator's area of responsibility are consistently successful
-	basic crane, winch and hoist signals	obtained from practical demonstration	

Function: Electrical, electronic and control engineering at the support level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Safe use of electrical equipment	Safe use and operation of electrical equipment, including:	Assessment of evidence obtained from one or more of the following:	Recognizes and reports electrical hazards and unsafe equipment
	.1 safety precautions before commencing work or repair	.1 approved in-service experience	Understands safe voltages for hand-held equipment
,	.2 isolation procedures .3 emergency procedures	<ul><li>.2 practical training</li><li>.3 examination</li><li>.4 approved training ship</li></ul>	Understands risks associated with high-voltage equipment and onboard work
	.4 different voltages on board	experience	
	Knowledge of the causes of electric shock and precautions to be observed to prevent shock		·

Function: Maintenance and repair at the support level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to shipboard maintenance and repair	Ability to use painting, lubrication and cleaning materials and equipment	Assessment of evidence obtained from practical demonstration	Maintenance activities are carried out in accordance with technical, safety and procedural specifications
Tanto ropian	Ability to understand and execute routine maintenance and repair procedures	Assessment of evidence obtained from one or more of the following:	Selection and use of equipment and tools is appropriate
	Knowledge of surface preparation techniques	.1 approved in-service experience	
	Knowledge of safe disposal of waste materials	.2 practical training	
		.3 examination	
	Understanding manufacturer's safety guidelines and shipboard instructions	.4 approved training ship experience	

Column 1	Column 2	Column 3	. Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to shipboard maintenance and repair (continued)	Knowledge of the application, maintenance and use of hand and power tools and measuring instruments and machine tools  Knowledge of metalwork		

Function:

Controlling the operation of the ship and care for persons on board at the support level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to the handling of stores	Knowledge-of procedures for safe handling, stowage and securing of stores	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 practical training 3 examination 4 approved training ship experience	Stores operations are carried out in accordance with established safety practices and equipment operating instructions  The handling of dangerous, hazardous and harmful stores complies with established safety practices  Communications within the operator's area of responsibility are consistently successful
Apply precautions and contribute to the prevention of poliution of the marine environment	Knowledge of the precautions to be taken to prevent pollution of the marine environment  Knowledge of use and operation of anti-pollution equipment  Knowledge of approved methods for disposal of marine pollutants	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 practical training 3 examination 4 approved training ship experience	Procedures designed to safeguard the marine environment are observed at all times

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Apply occupational health and safety procedures	Working knowledge of safe working practices and personal shipboard safety, including:  .1 electrical safety  .2 lockout/tag-out  .3 mechanical safety  .4 permit to work systems  .5 working aloft  .6 working in enclosed spaces  .7 lifting techniques and methods of preventing back injury  .8 chemical and biohazard safety  .9 personal safety equipment	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 practical training 3 examination 4 approved training ship experience	Procedures designed to safeguard personnel and the ship are observed at all times  Safe working practices are observed and appropriate safety and protective equipment is correctly used at all times

Mandatory minimum requirements for certification of electro-technical officers

#### Training

The education and training required by paragraph 2.3 of regulation III/6 shall include training in electronic and electrical workshop skills relevant to the duties of electro-technical officer.

#### Onboard training

- 2 Every candidate for certification as electro-technical officer shall follow an approved programme of onboard training which:
  - .1 ensures that, during the required period of seagoing service, the candidate receives systematic practical training and experience in the tasks, duties and responsibilities of an electro-technical officer;
  - is closely supervised and monitored by qualified and certificated officers aboard the ships in which the approved seagoing service is performed; and
  - .3 is adequately documented in a training record book.

- 3 Every candidate for certification as electro-technical officer shall be required to demonstrate the ability to undertake the tasks, duties and responsibilities listed in column 1 of table A-III/6.
- The minimum knowledge, understanding and proficiency required for certification is listed in column 2 of table A-III/6 and it shall take into account the guidance given in part B of this Code.
- 5 Every candidate for certification shall be required to provide evidence of having achieved the required standard of competence tabulated in columns 3 and 4 of table A-III/6.

 ${\it Table~A-III/6}$  . Specification of minimum standard of competence for electro-technical officers

Function: Electrical, electronic and control engineering at the operational level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge,	Methods for	Criteria for
-	understanding and	demonstrating	evaluating competence
	proficiency	competence	
Monitor the operation of electrical, electronic and	Basic understanding of the operation of mechanical engineering systems, including:	Examination and assessment of evidence obtained from one or more of the following:	Operation of equipment and system is in accordance with operating manuals
control systems	.1 prime movers, including main propulsion plant	.1 approved in-service experience	Performance levels are in accordance with technical specifications
	.2 engine-room auxiliary machinery	.2 approved training ship experience	
	.3 steering systems	.3 approved simulator training, where	
	.4 cargo handling systems	appropriate	
	.5 deck machinery	.4 approved laboratory equipment training	
	.6 hotel systems	•	
,	Basic knowledge of heat transmission, mechanics and hydromechanics	The state of the s	
	Knowledge of:	·	
	Electro-technology and electrical machines theory		
	Fundamentals of electronics and power electronics		
	Electrical power distribution boards and electrical equipment		
	Fundamentals of automation, automatic control systems and technology		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge,	Methods for	Criteria for
	understanding and	demonstrating	evaluating competence
	proficiency	competence	¯.
Monitor the	Instrumentation, alarm and		
operation of	monitoring systems		
electrical,		•	
electronic and	Electrical drives	•	
control systems	Technology of electrical		•
(continued)	materials ·		
	Electro-hydraulic and	,	<i>t</i>
	electro-pneumatic control		
	systems		
	Appreciation of the hazards	,	
	and precautions required for		,
	the operation of power		
	systems above 1,000 volts		
Monitor the	Preparation of control systems	Examination and	Surveillance of main
operation of	of propulsion and auxiliary	assessment of evidence	propulsion plant and
automatic control	machinery for operation	obtained from one or more	auxiliary systems is
systems of		of the following:	sufficient to maintain safe
propulsion and		.1 approved in-service	operation condition
auxiliary machinery		.1 approved in-service experience	
inacimiery		OKPOI IOIICO	
		.2 approved training ship	
	,	experience	
		.3 approved simulator	
		training, where	
-		арргоргіаte	
		.4. approved laboratory	
		equipment training	
Operate	Coupling, load sharing and	Examination and	Operations are planned and
generators	changing over generators	assessment of evidence	carried out in accordance
and distribution		obtained from one or more	with operating manuals,
systems		of the following:	established rules and
	Coupling and breaking	1 annunciad in complex	procedures to ensure safety of operations
	connection between switchboards and distribution	.1 approved in-service experience .	or obergnous
	panels	exportation ,	Electrical distribution
		.2 approved training ship	systems can be understood
	44	experience	and explained with
			drawings/instructions
		.3 approved simulator	
<u></u>		training, where appropriate	
1		appropriate	
		.4 approved laboratory	•
		equipment training	

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge,	Methods for	Criteria for
	understanding and	demonstrating	evaluating competence
	proficiency	competence	
Operate and maintain power systems in excess of 1,000 volts	Theoretical knowledge  High-voltage technology  Safety precautions and procedures  Electrical propulsion of the ships, electrical motors and control systems  Practical knowledge  Safe operation and maintenance of high-voltage systems, including knowledge of the special technical type of high-voltage systems and the danger	Examination and assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 approved training ship experience  .3 approved simulator training, where appropriate  .4 approved laboratory equipment training	Operations are planned and carried out in accordance with operating manuals, established rules and procedures to ensure safety of operations
Operate computers and computer networks on ships	resulting from operational voltage of more than 1,000 volts  Understanding of:  .1 main features of data processing  .2 construction and use of computer networks on ships  .3 bridge-based, engine-room-based and commercial computer use	Examination and assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 approved training ship experience  .3 approved simulator training, where appropriate  .4 approved laboratory equipment training	Computer networks and computers are correctly checked and handled
Use English in written and oral form	Adequate knowledge of the English language to enable the officer to use engineering publications and to perform the officer's duties	Examination and	English language publications relevant to the officer's duties are correctly interpreted  Communications are clear and understood

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge,	Methods for	Criteria for
	understanding and	demonstrating	evaluating competence
	proficiency	competence	
Use internal communication systems	Operation of all internal communication systems on board	Examination and assessment of evidence obtained from one or more of the following:	Transmission and reception of messages are consistently successful
		.1 approved in-service experience	Communication records are complete, accurate and comply with statutory requirements
		.2 approved training ship experience	
		.3 approved simulator training, where appropriate	
		.4 approved laboratory equipment training	-

Function: Maintenance and repair at the operational level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge,	Methods for	Criteria for
Competence	understanding and	demonstrating	evaluating competence
	proficiency	competence	,
Maintenance	Safety requirements for	Examination and	Safety measures for working
and repair of	working on shipboard	assessment of evidence	are appropriate
electrical and	electrical systems, including	obtained from one or	
electronic	the safe isolation of	more of the following:	Selection and use of hand tools,
equipment	electrical equipment	,	measuring instruments, and
	required before personnel	.1 approved workshop	testing equipment are
	are permitted to work on	skills training	appropriate and interpretation of results is accurate
	such equipment	.2 approved practical	or results is accurate
	Maintenance and repair of	experience and tests	Dismantling, inspecting,
	electrical system equipment,	experience and resis	repairing and reassembling
	switchboards, electric	.3 approved in-service	equipment are in accordance
	motors, generators and DC	experience	with manuals and good practice
	electrical systems and		
	equipment	.4 approved training	Reassembling and performance
•		ship experience	testing is in accordance with manuals and good practice
	Detection of electric		manuais and good practice
	malfunction, location of		
	faults and measures to prevent damage		
	prevent damage .		-
	Construction and operation		
	of electrical testing and		· .
	measuring equipment		
	Function and performance		
	tests of the following		
	equipment and their configuration:		
·	Comiguration.	·	•
	.1 monitoring systems		
	1		
· '	.2 automatic control		
	devices		
·	.3 protective devices	·	
	The interpretation of		
	electrical and electronic		
	diagrams		·
Maintenance	Appropriate electrical and	Examination and	The effect of malfunctions on
and repair of	mechanical knowledge and	assessment of evidence	associated plant and systems is accurately identified, ship's
automation and	skills	obtained from one or	technical drawings are correctly
control systems	G. C. L	more of the following:	interpreted, measuring and
of main	Safety and emergency	.1 approved in-service	calibrating instruments are
propulsion and	procedures	experience	correctly used and actions
auxiliary			taken are justified
machinery	<u> </u>	1,	

Column 1	Column 2		Column 3	Column 4
Competence	Knowledge,	,	Methods for	Criteria for
	understanding and		demonstrating	evaluating competence
	proficiency	-	competence	
	Safe isolation of equipment and associated systems required before personnel are permitted to work on such plant or equipment  Practical knowledge for the testing, maintenance, fault finding and repair  Test, detect faults and maintain and restore electrical and electronic control equipment to operating condition	.3	approved training ship experience approved simulator training, where appropriate approved laboratory equipment training	Isolation, dismantling and reassembly of plant and equipment are in accordance with manufacturer's safety guidelines and shipboard instructions and legislative and safety specifications. Action taken leads to the restoration of automation and control systems by the method most suitable and appropriate to the prevailing circumstances and conditions
Maintenance and repair of bridge navigation equipment and ship communication systems	Knowledge of the principles and maintenance procedures of navigation equipment, internal and external communication systems  Theoretical knowledge:  Electrical and electronic systems operating in flammable areas  Practical knowledge:  Carrying out safe maintenance and repair procedures  Detection of machinery malfunction, location of faults and action to prevent damage	The state of the s		The effect of malfunctions on associated plant and systems is accurately identified, ship's technical drawings are correctly interpreted, measuring and calibrating instruments are correctly used and actions taken are justified  Isolation, dismantling and re-assembly of plant and equipment are in accordance with manufacturer's safety guidelines and shipboard instructions, legislative and safety specifications. Action taken leads to the restoration of bridge navigation equipment and ship communication systems by the method most suitable and appropriate to the prevailing circumstances and conditions

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge,	Methods for	Criteria for
Competence	understanding and	demonstrating	evaluating competence
	proficiency	competence	
Maintenance	Appropriate electrical and	Examination and	The effect of malfunctions on
and repair of	mechanical knowledge and	assessment of evidence	associated plant and systems is
electrical,	skills	obtained from one or	accurately identified, ship's technical drawings are correctly
electronic and	G C to and a suppose	more of the following:	interpreted, measuring and
control systems of deck	Safety and emergency procedures	.1 approved in-service	calibrating instruments are
machinery and	procedures .	experience	correctly used and actions
cargo-handling	Safe isolation of equipment		taken are justified
equipment	and associated systems	.2 approved training ship	× 1 12
	required before personnel	experience	Isolation, dismantling and re-assembly of plant and
	are permitted to work on	.3 approved simulator	equipment are in accordance
	such plant or equipment	training, where	with manufacturer's safety
	Practical knowledge for the	appropriate	guidelines and shipboard
	testing, maintenance, fault		instructions, legislative and
	finding and repair	.4 approved laboratory	safety specifications. Action
		equipment training	taken leads to the restoration of deck machinery and
	Test, detect faults and	·	cargo-handling equipment by
	maintain and restore		the method most suitable and
	control equipment to		appropriate to the prevailing
	operating condition		circumstances and conditions
	1.		
	•		
		'	
Maintenance	Theoretical knowledge:		The effect of malfunctions on
and repair of			associated plant and systems is
control and	Electrical and electronic		accurately identified, ship's technical drawings are correctly
safety systems	systems operating in		interpreted, measuring and
of hotel	flammable areas		calibrating instruments are
equipment	Practical knowledge:		correctly used and actions
	1. ( ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )		taken are justified
	Carrying out safe		
	maintenance and repair		Isolation, dismantling and re-assembly of plant and
	procedures		equipment are in accordance
	Detection of machinery		with manufacturer's safety
-	malfunction, location of		guidelines and shipboard
,	faults and action to prevent		instructions, legislative and
	damage		safety specifications. Action
		***************************************	taken leads to the restoration of control and safety systems of
			hotel equipment by the method
	) 	-	most suitable and appropriate
			to the prevailing circumstances
			and conditions

Function: Controlling the operation of the ship and care for persons on board at operational level

Column 2	Column 3	Column 4
. Knowledge,	Methods for	Criteria for
understanding and	demonstrating	evaluating competence
proficiency	competence	
Prevention of pollution of the marine environment  Knowledge of the precautions to be taken to prevent pollution of the marine environment  Anti-pollution procedures and all associated equipment  Importance of proactive	Examination and assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 approved training ship experience  .3 approved training	Procedures for monitoring shipboard operations and ensuring compliance with pollution-prevention requirements are fully observed  Actions to ensure that a positive environmental reputation is maintained
environment	-	,
Fire prevention and fire-fighting appliances  Ability to organize fire drills  Knowledge of classes and chemistry of fire	Assessment of evidence obtained from approved fire-fighting training and experience as set out in section A-VI/3, paragraphs 1 to 3	The type and scale of the problem is promptly identified and initial actions conform with the emergency procedure and contingency plans for the ship
Knowledge of fire-fighting systems  Action to be taken in the event of fire, including fires involving oil systems		Evacuation, emergency shutdown and isolation procedures are appropriate to the nature of the emergency and are implemented promptly  The order of priority, and the levels and time-scales of making reports and informing personnel on board, are relevant to the nature of the emergency and reflect the urgency of
	Knowledge, understanding and proficiency  Prevention of pollution of the marine environment  Knowledge of the precautions to be taken to prevent pollution of the marine environment  Anti-pollution procedures and all associated equipment  Importance of proactive measures to protect the marine environment  Fire prevention and fire-fighting appliances  Ability to organize fire drills  Knowledge of classes and chemistry of fire  Knowledge of fire-fighting systems  Action to be taken in the event of fire, including fires	Knowledge, understanding and proficiency  Prevention of pollution of the marine environment  Knowledge of the precautions to be taken to prevent pollution of the marine environment  Anti-pollution procedures and all associated equipment  Importance of proactive measures to protect the marine environment  Fire prevention and fire-fighting appliances  Ability to organize fire drills  Knowledge of classes and chemistry of fire  Knowledge of fire-fighting systems  Methods for demonstrating competence  Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience  2 approved training ship experience  3 approved training mexperience obtained from approved fire-fighting training and experience as set out in section A-VI/3, paragraphs 1 to 3  Knowledge of fire-fighting systems

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Operate life-saving appliances	Life-saving  Ability to organize abandon ship drills and knowledge of the operation of survival craft and rescue boats, their launching appliances and arrangements, and their equipment, including radio life-saving appliances, satellite EPIRBs, SARTs, immersion suits and thermal protective aids	Assessment of evidence obtained from approved training and experience as set out in section A-VI/2, paragraphs 1 to 4	Actions in responding to abandon ship and survival situations are appropriate to the prevailing circumstances and conditions and comply with accepted safety practices and standards
Apply medical first aid on board ship	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	Assessment of evidence obtained from approved training as set out in section A-VI/4, paragraphs 1 to 3	Identification of probable cause, nature and extent of injuries or conditions is prompt and treatment minimizes immediate threat to life
Application of leadership and teamworking skills	likely to occur on board ship  Working knowledge of shipboard personnel management and training  Ability to apply task and workload management, including:  1 planning and co-ordination 2 personnel assignment 3 time and resource constraints 4 prioritization		The crew are allocated duties and informed of expected standards of work and behaviour in a manner appropriate to the individuals concerned  Training objectives and activities are based on assessment of current competence and capabilities and operational requirements

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge,	Methods for	Criteria for
	understanding and	demonstrating	evaluating competence
	proficiency	competence	
Application of leadership and teamworking skills	Knowledge and ability to apply effective resource management:		Operations are planned and resources are allocated as needed in correct priority to perform necessary tasks
(continued)	.1 allocation, assignment, and prioritization of resources .2 effective communication on board and ashore .3 decisions reflect consideration of team experiences 4 assertiveness and leadership, including motivation .5 obtaining and maintaining situational awareness  Knowledge and ability to apply decision-making techniques:		Communication is clearly and unambiguously given and received  Effective leadership behaviours are demonstrated  Necessary team member(s) share accurate understanding of current and predicted vessel state and operational status and external environment  Decisions are most effective for the situation
	<ul> <li>.1 Situation and risk assessment</li> <li>.2 Identify and consider generated options</li> <li>.3 Selecting course of action</li> <li>.4 Evaluation of outcome effectiveness</li> </ul>		errective for the Saddholi
Contribute to the safety of personnel and ship	Knowledge of personal survival techniques  Knowledge of fire prevention and ability to fight and extinguish fires  Knowledge of elementary first aid	Assessment of evidence obtained from approved training and experience as set out in section A-VI/1, paragraph 2.	Appropriate safety and protective equipment is correctly used  Procedures and safe working practices designed to safeguard personnel and the ship are observed at all times
	Knowledge of personal safety and social responsibilities		Procedures designed to safeguard the environment are observed at all times  Initial and follow-up actions on becoming aware of an emergency conform with established emergency response procedures

Mandatory minimum requirements for certification of electro-technical rating

- Every electro-technical rating serving on a seagoing ship powered by main propulsion machinery of 750 kW propulsion power or more shall be required to demonstrate the competence to perform the functions at the support level, as specified in column 1 of table A-III/7.
- The minimum knowledge, understanding and proficiency required of an electro-technical rating serving on a seagoing ship powered by main propulsion machinery of 750 kW propulsion power or more is listed in column 2 of table A-III/7.
- Every candidate for certification shall be required to provide evidence of having achieved the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence specified in columns 3 and 4 of table A-III/7.

 ${\it Table~A-III/7} \\ {\it Specification~of~minimum~standard~of~competence~for~electro-technical~ratings}$ 

Function: Electrical, electronic and control engineering at the support level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Safe use of electrical equipment	Safe use and operation of electrical equipment, including:  1 safety precautions before commencing work or repair  2 isolation procedures  3 emergency procedures  4 different voltages on board  Knowledge of the causes of electric shock and precautions to be observed to prevent shock	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 practical training 3 examination 4 approved training ship experience	Understands and follows safety instructions of electrical equipment and machinery  Recognizes and reports electrical hazards and unsafe equipment  Understands safe voltages for hand-held equipment  Understands risks associated with high-voltage equipment and onboard work
Contribute to monitoring the operation of electrical systems and machinery	Basic knowledge of the operation of mechanical engineering systems, including:  1 prime movers, including main propulsion plant  2 engine-room auxiliary machineries  3 steering systems  4 cargo-handling systems  5 deck machineries  6 hotel systems	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 practical training 3 examination 4 approved training ship experience	Consider that ensures:     Operation of equipment and system is in accordance with operating manuals     Performance levels are in accordance with technical specifications

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to monitoring the operation of electrical systems and machinery (continued)	Basic knowledge of:  1 electro-technology and electrical machines theory  2 electrical power distribution boards and electrical equipment  3 fundamentals of automatic control systems and technology  4 instrumentation, alarm and monitoring systems  5 electrical drives  6 electro-hydraulic and electro-pneumatic control systems  7 coupling, load sharing and changes in electrical configuration		
Use hand tools, electrical and electronic measurement equipment for fault finding, maintenance and repair operations	Safety requirements for working on shipboard electrical systems  Application of safe working practices  Basic knowledge of:  1 construction and operational characteristics of shipboard AC and DC systems and equipment  2 use of measuring instruments, machine tools, and hand and power tools	Assessment of evidence obtained from one or more of the following:  1 approved workshop skills training 2 approved practical experience and tests	Implementation of safety procedures is satisfactory  Selection and use of test equipment is appropriate and interpretation of results is accurate  Selection of procedures for the conduct of repair and maintenance is in accordance with manuals and good practice

Function: Maintenance and repair at the support level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to shipboard maintenance and repair	Ability to use lubrication and cleaning materials and equipment	Assessment of evidence obtained from one or more of the following:	Maintenance activities are carried out in accordance with technical, safety and procedural specifications
	Knowledge of safe disposal of waste materials	.1 approved in-service experience	Selection and use of equipment and tools is appropriate
	Ability to understand and execute routine maintenance	.2 practical training	
	and repair procedures	.3 examination	
	Understanding manufacturer's safety guidelines and shipboard instructions	.4 approved training ship experience	
Contribute to the maintenance	Safety and emergency procedures	Examination and assessment of evidence obtained from one or	The effect of malfunctions on associated plant and systems is accurately identified, ship's
and repair of electrical systems and machinery on	Basic knowledge of electro-technical drawings and safe isolation of equipment and associated	more of the following:  .1 approved in-service experience	technical drawings are correctly interpreted, measuring and calibrating instruments are correctly used and actions
board	systems required before personnel are permitted to work on such plant or	.2 approved training ship experience	taken are justified  Isolation, dismantling and reassembly of plant and
The state of the s	Test, detect faults and maintain and restore	.3 approved simulator training, where appropriate	equipment is in accordance with manufacturer's safety guidelines and shipboard instructions
	electrical control equipment and machinery to operating condition	.4 approved laboratory equipment training	Ilisti uctionis
-	Electrical and electronic equipment operating in flammable areas	,	
	Basics of ship's fire-detection system	·	
	Carrying out safe maintenance and repair procedures		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to the maintenance and repair of electrical systems and machinery on board (continued)	Detection of machinery malfunction, location of faults and action to prevent damage  Maintenance and repair of lighting fixtures and supply systems		

Function: Controlling the operation of the ship and care for persons on board at the support level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to the handling of stores	Knowledge of procedures for safe handling, stowage and securing of stores	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 practical training 3 examination 4 approved training ship experience	Stores stowage operations are carried out in accordance with established safety practices and equipment operating instructions  The handling of dangerous, hazardous and harmful stores complies with established safety practices  Communications within the operator's area of responsibility are consistently successful
Apply precautions and contribute to the prevention of pollution of the marine environment	Knowledge of the precautions to be taken to prevent pollution of the marine environment  Knowledge of use and operation of anti-pollution equipment/agents  Knowledge of approved methods for disposal of marine pollutants	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 practical training 3 examination 4 approved training ship experience	Procedures designed to safeguard the marine environment are observed at all times

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Apply occupational health and safety	Working knowledge of safe working practices and personal shipboard safety, including:	Assessment of evidence obtained from one or more of the following:	Procedures designed to safeguard personnel and the ship are observed at all times
procedures	.1 electrical safety	.1 approved in-service experience	Safe working practices are observed and appropriate safety and protective equipment is
	.2 lockout/tag-out	.2 practical training	correctly used at all times
	.3 mechanical safety	.3 examination	
	.4 permit to work systems	.4 approved training ship experience	
	.5 working aloft		
	.6 working in enclosed spaces		,
	.7 lifting techniques and methods of preventing back injury		
	.8 chemical and biohazard safety		-
	.9 personal safety equipment		

#### CHAPTER IV

#### Standards regarding radio operators

Section A-IV/1
Application

(No provisions)

Section A-IV/2

Mandatory minimum requirements for certification of GMDSS radio operators

- The minimum knowledge, understanding and proficiency required for certification of GMDSS radio operators shall be sufficient for radio operators to carry out their radio duties. The knowledge required for obtaining each type of certificate defined in the Radio Regulations shall be in accordance with those regulations. In addition, every candidate for certification of competency shall be required to demonstrate ability to undertake the tasks, duties and responsibilities listed in column 1 of table A-IV/2.
- The knowledge, understanding and proficiency for endorsement under the Convention of certificates issued under the provisions of the Radio Regulations are listed in column 2 of table A-IV/2.
- 3 The level of knowledge of the subjects listed in column 2 of table A-IV/2 shall be sufficient for the candidate to carry out his duties.\*
- 4 Every candidate shall provide evidence of having achieved the required standard of competence through:
  - .1 demonstration of competence to perform the tasks and duties and to assume responsibilities listed in column 1 of table A-IV/2, in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of that table; and
  - .2 examination or continuous assessment as part of an approved course of training based on the material set out in column 2 of table A-IV/2.

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

 ${\it Table~A-IV/2}\\ .~{\it Specification~of~minimum~standard~of~competence~for~GMDSS~radio~operators}$ 

Function: Radiocommunications at the operational level

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Transmit and receive information using GMDSS subsystems and equipment and fulfilling the functional requirements of GMDSS	In addition to the requirements of the Radio Regulations, a knowledge of:  1 search and rescue radiocommunications, including procedures in the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual  2 the means to prevent the transmission of false distress alerts and the procedures to mitigate the effects of such alerts  3 ship reporting systems  4 radio medical services  5 use of the International Code of Signals and the IMO Standard Marine Communication Phrases  6 the English language, both written and spoken, for the communication of information relevant to safety of life at sea  Note: This requirement may be reduced in the case of the Restricted Radio Operator's Certificate	Examination and assessment of evidence obtained from practical demonstration of operational procedures, using:  1 approved equipment 2 GMDSS communication simulator, where appropriate 3 radiocommunication laboratory equipment	Transmission and reception of communications comply with international regulations and procedures and are carried out efficiently and effectively  English language messages relevant to the safety of the ship, security and persons on board and protection of the marine environment are correctly handled

See paragraph 72 of section B-I/12 of this Code.

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Provide radio services in emergencies	The provision of radio services in emergencies such as:  .1 abandon ship .2 fire on board ship .3 partial or full breakdown of radio installations  Preventive measures for the safety of ship and personnel in connection with hazards related to radio equipment, including electrical and non-ionizing radiation hazards	Examination and assessment of evidence obtained from practical demonstration of operational procedures, using:  1 approved equipment 2 GMDSS communication simulator, where appropriate  .3 radiocommunication laboratory equipment	Response is carried out efficiently and effectively

See paragraph 72 of section B-I/12 of this Code.

#### CHAPTER V

### Standards regarding special training requirements for personnel on certain types of ships

#### Section A-V/1-1

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

- Every candidate for certification in basic training for oil and chemical tanker cargo operations shall be required to:
  - .1 demonstrate the competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-V/1-1-1; and
  - .2 provide evidence of having achieved:
    - .2.1 the minimum knowledge, understanding and proficiency listed in column 2 of table A-V/1-1-1, and
    - .2.2 the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-V/1-1-1.
- 2 Every candidate for certification in advanced training for oil tanker cargo operations shall be required to:
  - .1 demonstrate the competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-V/1-1-2; and
  - .2 provide evidence of having achieved:
    - .2.1 the minimum knowledge, understanding and proficiency listed in column 2 of table A-V/1-1-2, and
    - .2.2 the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-V/1-1-2.
- 3 Every candidate for certification in advanced training for chemical tanker cargo operations shall be required to:
  - .1 demonstrate the competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-V/1-1-3; and

- .2 provide evidence of having achieved:
  - .2.1 the minimum knowledge, understanding and proficiency listed in column 2 of table A-V/1-1-3, and
  - .2.2 the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-V/1-1-3.

Table A-V/1-1-1
Specification of minimum standard of competence in basic training for oil and chemical tanker cargo operations

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to the safe cargo operation of oil and chemical tankers	Basic knowledge of tankers:  1 types of oil and chemical tankers  2 general arrangement and construction  Basic knowledge of cargo operations:  1 piping systems and valves  2 cargo pumps  3 loading and unloading  4 tank cleaning, purging, gas-freeing and inerting  Basic knowledge of the physical properties of oil and chemicals:  1 pressure and temperature, including vapour pressure/temperature relationship  2 types of electrostatic charge generation  3 chemical symbols  Knowledge and understanding of tanker safety culture and safety management	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training 4 approved training programme	Communications within the area of responsibility are clear and effective  Cargo operations are carried out in accordance with accepted principles and procedures to ensure safety of operations

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Take precautions to prevent hazards	Basic knowledge of the hazards associated with tanker operations, including:  1 health hazards 2 environmental hazards 3 reactivity hazards 4 corrosion hazards 5 explosion and flammability hazards 6 sources of ignition, including electrostatic hazards 7 toxicity hazards 8 vapour leaks and clouds 8 Basic knowledge of hazard controls: 1 inerting, water padding, drying agents and monitoring techniques 1 anti-static measures 1 ventilation 1 segregation 1 cargo inhibition 1 importance of cargo compatibility 1 atmospheric control 1 gas testing 1 Understanding of information on a Material Safety Data Sheet (MSDS)	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training 4 approved training programme	Correctly identifies, on an MSDS, relevant cargo-related hazards to the vessel and to personnel, and takes the appropriate actions in accordance with established procedures  Identification and actions on becoming aware of a hazardous situation conform to established procedures in line with best practice

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Apply occupational health and safety precautions and measures	Function and proper use of gas-measuring instruments and similar equipment  Proper use of safety equipment and protective devices, including:  1 breathing apparatus and tank-evacuating equipment  2 protective clothing and equipment  3 resuscitators  4 rescue and escape equipment  Basic knowledge of safe working practices and procedures in accordance with legislation and industry guidelines and personal shipboard safety relevant to oil and chemical tankers, including:  1 precautions to be taken when entering enclosed spaces  2 precautions to be taken before and during repair and maintenance work  3 safety measures for hot and cold work  4 electrical safety	, -	Procedures for entry into enclosed spaces are observed.  Procedures and safe working practices designed to safeguard personnel and the ship are observed at all times.  Appropriate safety and protective equipment is correctly used.
	.5 ship/shore safety checklist		
-	Basic knowledge of first aid with reference to a Material Safety Data Sheet (MSDS)		First aid do's and don'ts

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Carry out fire-fighting operations	Tanker fire response organization and action to be taken  Fire hazards associated with cargo handling and transportation of hazardous and noxious liquids in bulk  Fire-fighting agents used to extinguish oil and chemical fires  Fixed fire-fighting foam system operations  Portable fire-fighting foam operations  Fixed dry chemical system operations  Spill containment in relation to fire-fighting operations	Practical exercises and instruction conducted under approved and truly realistic training conditions (e.g., simulated shipboard conditions) and, whenever possible and practicable, in darkness	Initial actions and follow-up actions on becoming aware of fire on board conform with established practices and procedures  Action taken on identifying muster signal is appropriate to the indicated emergency and complies with established procedures  Clothing and equipment are appropriate to the nature of the fire-fighting operations  The timing and sequence of individual actions are appropriate to the prevailing circumstances and conditions  Extinguishment of fire is achieved using appropriate procedures, techniques and fire-fighting agents
Respond to emergencies	Basic knowledge of emergency procedures, including emergency shutdown	Examination and assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 approved training ship experience  .3 approved simulator training  .4 approved training programme	The type and impact of the emergency is promptly identified and the response actions conform to the emergency procedures and contingency plans

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Take precautions to prevent pollution of the environment from the release of oil or chemicals	Basic knowledge of the effects of oil and chemical pollution on human and marine life  Basic knowledge of shipboard procedures to prevent pollution  Basic knowledge of measures to be taken in the event of spillage, including the need to:  1 report relevant information to the responsible persons  2 assist in implementing shipboard	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship	Procedures designed to safeguard the environment are observed at all times

Table A-V/1-1-2
Specification of minimum standard of competence in advanced training for oil tanker cargo operations

Column 1	Column 2	Column 3	· Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Ability to safely perform and monitor all cargo operations	Design and characteristics of an oil tanker  Knowledge of oil tanker design, systems and equipment, including:  I general arrangement and construction  pumping arrangement and equipment  tank arrangement, pipeline system and tank venting arrangement  gauging systems and alarms  cargo heating systems  tank cleaning, gas-freeing and inerting systems  tank cleaning, gas-freeing and inerting systems  acargo area venting and accommodation ventilation  slop arrangements  lo vapour recovery systems  la cargo-related electrical and electronic control system  requipment, including Oil Discharge Monitoring Equipment (ODME)	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training 4 approved training programme	Communications are clear, understood and successful  Cargo operations are carried out in a safe manner, taking into account oil tanker designs, systems and equipment  Cargo operations are planned, risk is managed and carried out in accordance with accepted principles and procedures to ensure safety of operations and avoid pollution of the marine environment  Potential non-compliance with cargo-operation-related procedures is promptly identified and rectified  Proper loading, stowage and unloading of cargoes ensures that stability and stress conditions remain within safe limits at all times  Actions taken and procedures followed are correctly applied and the appropriate shipboard cargo-related equipment is properly used  Calibration and use of monitoring and gas-detection equipment comply with operational practices and procedures

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Ability to safely perform and monitor all cargo operations (continued)	13 tank coating  14 tank temperature and pressure control systems  15 fire-fighting systems  Knowledge of pump theory and characteristics, including types of cargo pumps and their safe operation  Proficiency in tanker safety culture and implementation of safety-management system  Knowledge and understanding of monitoring and safety systems, including the emergency shutdown  Loading, unloading, care and handling of cargo  Ability to perform cargo measurements and calculations  Knowledge of the effect of bulk liquid cargoes on trim, stability and structural		Procedures for monitoring and safety systems ensure that all alarms are detected promptly and acted upon in accordance with established emergency procedures
	integrity  Knowledge and understanding of oil cargo-related operations, including:  1 loading and unloading plans  2 ballasting and deballasting  3 tank cleaning operations  4 inerting  5 gas-freeing		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Ability to safely perform and monitor all cargo operations (continued)	.6 ship-to-ship transfers  .7 load on top  .8 crude oil washing  Development and application of cargo-related operation plans, procedures and checklists  Ability to calibrate and use monitoring and gas-detection systems, instruments and equipment  Ability to manage and supervise personnel with cargo-related responsibilities		Personnel are allocated duties and informed of procedures and standards of work to be followed, in a manner appropriate to the individuals concerned and in accordance with safe operational practices
Familiarity with physical and chemical properties of oil cargoes	Knowledge and understanding of the physical and chemical properties of oil cargoes  Understanding the information contained in a Material Safety Data Sheet (MSDS)	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience  2 approved training ship experience  3 approved simulator training  4 approved training programme	Effective use is made of information resources for identification of properties and characteristics of oil cargoes and related gases, and their impact on safety, the environment and vessel operation

Column 1	Column 2	. Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Take precautions to prevent hazards	Knowledge and understanding of the hazards and control measures associated with oil tanker cargo operations, including:  1 toxicity  2 flammability and explosion  3 health hazards  4 inert gas composition  5 electrostatic hazards  Knowledge and understanding of dangers of non-compliance with relevant rules/regulations	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training 4 approved training programme	Relevant cargo-related hazards to the vessel and to personnel associated with oil tanker cargo operations are correctly identified, and proper control measures are taken
Apply occupational health and safety precautions	Knowledge and understanding of safe working practices, including risk assessment and personal shipboard safety relevant to oil tankers:  I precautions to be taken when entering enclosed spaces, including correct use of different types of breathing apparatus  Precautions to be taken before and during repair and maintenance work  precautions for hot and cold work  precautions for electrical safety  safety  use of appropriate Personal Protective Equipment (PPE)	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training 4 approved training programme	Procedures designed to safeguard personnel and the ship are observed at all times  Safe working practices are observed and appropriate safety and protective equipment is correctly used  Working practices are in accordance with legislative requirements, codes of practice, permits to work and environmental concerns  Correct use of breathing apparatus  Procedures for entry into enclosed spaces are observed

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Respond to emergencies	Knowledge and understanding of oil tanker emergency procedures, including:  1 ship emergency response plans	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience	The type and impact of the emergency is promptly identified and the response actions conform with established emergency procedures and contingency plans
	<ul> <li>.2 cargo operations emergency shutdown</li> <li>.3 actions to be taken in the event of failure of systems or services essential to cargo</li> <li>.4 fire-fighting on oil tankers</li> <li>.5 enclosed space rescue</li> <li>.6 use of a Material Safety Data Sheet (MSDS)</li> <li>Actions to be taken following collision, grounding, or spillage</li> <li>Knowledge of medical first aid procedures on board oil tankers</li> </ul>	<ul> <li>.2 approved training ship experience</li> <li>.3 approved simulator training</li> <li>.4 approved training programme</li> </ul>	The order of priority, and the levels and time-scales of making reports and informing personnel on board, are relevant to the nature of the emergency and reflect the urgency of the problem  Evacuation, emergency shutdown and isolation procedures are appropriate to the nature of the emergency and are implemented promptly  The identification of and actions taken in a medical emergency conform to current recognized first aid practice
Take precautions to prevent pollution of the environment	Understanding of procedures to prevent pollution of the atmosphere and the environment	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience  2 approved training ship experience  3 approved simulator training  4 approved training programme	and international guidelines  Operations are conducted in accordance with accepted principles and procedures to prevent pollution of the environment

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Monitor and control compliance with legislative requirements	Knowledge and understanding of relevant provisions of the International Convention for the Prevention of Pollution from Ships (MARPOL), as amended, and other relevant IMO instruments, industry guidelines and port regulations as commonly applied	Examination and assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 approved training ship experience  .3 approved simulator training  .4 approved training programme	The handling of cargoes complies with relevant IMO instruments and established industrial standards and codes of safe working practice

Table A-V/1-1-3
Specification of minimum standard of competence in advanced training for chemical tanker cargo operations

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Ability to safely perform and monitor all cargo operations	Design and characteristics of a chemical tanker  Knowledge of chemical tanker designs, systems, and equipment, including:  1 general arrangement and construction  2 pumping arrangement and equipment  3 tank construction and arrangement  4 pipeline and drainage systems  5 tank and cargo pipeline pressure and temperature control systems and alarms  6 gauging control systems and alarms  7 gas-detecting systems  8 cargo heating and cooling systems  9 tank cleaning systems  10 cargo tank environmental control systems  11 ballast systems  12 cargo area venting and accommodation ventilation  13 vapour return/recovery systems  14 fire-fighting systems	assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training 4 approved training programme	Communications are clear, understood and successful  Cargo operations are carried out in a safe manner, taking into account chemical tanker designs, systems and equipment  Cargo operations are planned, risk is managed and carried out in accordance with accepted principles and procedures to ensure safety of operations and avoid pollution of the marine environment

Column 1	. Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Ability to safely perform and monitor all cargo operations (continued)	1.15 tank, pipeline and fittings' material and coatings  1.16 slop management  Knowledge of pump theory and characteristics, including types of cargo pumps and their safe operation  Proficiency in tanker safety culture and implementation of safety management system  Knowledge and understanding of monitoring and safety systems, including the emergency shutdown system  Loading, unloading, care and handling of cargo  Ability to perform cargo measurements and calculations  Knowledge of the effect of bulk liquid cargoes on trim and stability and structural integrity  Knowledge and understanding of chemical cargo-related operations, including:  1 loading and unloading plans  2 ballasting and deballasting  3 tank cleaning operations  4 tank atmosphere control		Procedures for monitoring and safety systems ensure that all alarms are detected promptly and acted upon in accordance with established procedures  Proper loading, stowage and unloading of cargoes ensures that stability and stress conditions remain within safe limits at all times  Potential non-compliance with cargo-related procedures is promptly identified and rectified  Actions taken and procedures followed are correctly identified and appropriate shipboard cargo-related equipment is properly used

Column 1	. Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Ability to safely perform and monitor all cargo operations (continued)	<ul> <li>.5 inerting</li> <li>.6 gas-freeing</li> <li>.7 ship-to-ship transfers</li> <li>.8 inhibition and stabilization requirements</li> <li>.9 heating and cooling</li> </ul>		
	requirements and consequences to adjacent cargoes  .10 cargo compatibility and segregation  .11 high-viscosity cargoes  .12 cargo residue operations  .13 operational tank entry  Development and application of cargo-related operation		
	plans, procedures and checklists Ability to calibrate and use monitoring and gas-detection systems, instruments and equipment		Calibration and use of monitoring and gas-detection equipment are consistent with safe operational practices and procedures
	Ability to manage and supervise personnel with cargo-related responsibilities		Personnel are allocated duties and informed of procedures and standards of work to be followed, in a manner appropriate to the individuals concerned and in accordance with safe operational practices

Column 1	Column 2	Column 3	Column 4
Competence :	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Familiarity with physical and chemical properties of chemical cargoes	Knowledge and understanding of the chemical and the physical properties of noxious liquid substances, including:  1 chemical cargoes categories (corrosive, toxic, flammable, explosive)  2 chemical groups and industrial usage  3 reactivity of cargoes Understanding the information contained in a Material Safety Data Sheet (MSDS)	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training 4 approved training programme	Effective use is made of information resources for identification of properties and characteristics of noxious liquid substances and related gases, and their impact on safety, environmental protection and vessel operation
Take precautions to prevent hazards	Knowledge and understanding of the hazards and control measures associated with chemical tanker cargo operations, including:  I flammability and explosion  2 toxicity  3 health hazards  4 inert gas composition  5 electrostatic hazards  6 reactivity  7 corrosivity  8 low-boiling-point cargoes  9 high-density cargoes  10 solidifying cargoes  11 polymerizing cargoes	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training 4 approved training programme	Relevant cargo-related hazards to the vessel and to personnel associated with chemical tanker cargo operations are correctly identified, and proper control measures are taken

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Take precautions to prevent hazards (continued)	Knowledge and understanding of dangers of non-compliance with relevant rules/regulations		., .
Apply occupational health and safety precautions	Knowledge and understanding of safe working practices, including risk assessment and personal shipboard safety relevant to chemical tankers:  1 precautions to be taken when entering enclosed spaces, including correct use of different types of breathing apparatus  2 precautions to be taken before and during repair and maintenance work  3 precautions for hot and cold work  4 precautions for electrical safety  5 use of appropriate Personal Protective Equipment (PPE)	Examination and assessment of evidence obtained from one or more of the following:  1. approved in-service experience 2. approved training ship experience 3. approved simulator training 4. approved training programme	Procedures designed to safeguard personnel and the ship are observed at all times  Safe working practices are observed and appropriate safety and protective equipment is correctly used  Working practices are in accordance with legislative requirements, codes of practice permits to work and environmental concerns  Correct use of breathing apparatus  Procedures for entry into enclosed spaces are observed

Column 1		Column 2		Column 3	Column 4
Competence	Knov	wledge, understanding and proficiency		Methods for demonstrating competence	Criteria for evaluating competence
Respond to emergencies	under tanke proce	vledge and rstanding of chemical r emergency dures, including: hip emergency response lans	ass obt	amination and essment of evidence ained from one or re of the following: approved in-service experience	The type and impact of the emergency is promptly identified and the response actions conform with established emergency procedures and contingency plans
		argo operations mergency shutdown	.2	approved training ship experience	The order of priority, and the levels and time-scales of making reports and informing
	er sy	ctions to be taken in the vent of failure of ystems or services ssential to cargo	.3	approved simulator training approved training programme	personnel on board, are relevant to the nature of the emergency and reflect the urgency of the problem
		ire fighting on chemical ankers		10	Evacuation, emergency shutdown and isolation procedures are appropriate to
	.5 e	nclosed space rescue		٠.	the nature of the emergency and are implemented promptly
	.6 c	argo reactivity			
	.7 је	ettisoning cargo			·
		use of a Material Safety Data Sheet (MSDS)			
		ns to be taken following ion, grounding, or ge		, .	
	aid prochem refere Aid C	viedge of medical first rocedures on board ical tankers, with ence to the Medical First Juide for Use in fents involving rerous Goods (MFAG)	-		The identification of and actions taken in a medical emergency conform to current recognized first aid practice and international guidelines

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Take precautions to prevent pollution of the environment	Understanding of procedures to prevent pollution of the atmosphere and the environment	Examination and assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 approved training ship experience  .3 approved simulator training  .4 approved training programme	Operations are conducted in accordance with accepted principles and procedures to prevent pollution of the environment
Monitor and control compliance with legislative requirements	Knowledge and understanding of relevant provisions of the International Convention for the Prevention of Pollution from Ships (MARPOL) and other relevant IMO instruments, industry guidelines and port regulations as commonly applied  Proficiency in the use of the IBC Code and related	Examination and assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 approved training ship experience  .3 approved simulator training	The handling of cargoes complies with relevant IMO instruments and established industrial standards and codes of safe working practice
	documents	.4 approved training programme	

#### Section A-V/1-2

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

#### Standard of competence

- Every candidate for certification in basic training for liquefied gas tanker cargo operations shall be required to:
  - .1 demonstrate the competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-V/1-2-1; and
  - .2 provide evidence of having achieved:
    - .2.1 the minimum knowledge, understanding and proficiency listed in column 2 of table A-V/1-2-1, and
    - .2.2 the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-V/1-2-1.
- 2 Every candidate for certification in advanced training for liquefied gas tanker cargo operations shall be required to:
  - .1 demonstrate the competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-V/1-2-2; and
  - .2 provide evidence of having achieved:
    - .2.1 the minimum knowledge, understanding and proficiency listed in column 2 of table A-V/1-2-2, and
    - .2.2 the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-V/1-2-2.

Table A-V/1-2-1
Specification of minimum standard of competence in basic training for liquefied gas tanker cargo operations

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to the safe operation of a liquefied gas tanker	Design and operational characteristics of liquefied gas tankers  Basic knowledge of liquefied gas tankers  1 types of liquefied gas tankers  2 general arrangement and construction  Basic knowledge of cargo operations:  1 piping systems and valves  2 cargo handling equipment  3 loading, unloading and care in transit  4 emergency shutdown (ESD) system  5 tank cleaning, purging, gas-freeing and inerting  Basic knowledge of the physical properties of liquefied gases, including:  1 properties and characteristics  2 pressure and temperature, including vapour pressure/temperature relationship  3 types of electrostatic charge generation	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training 4 approved training programme	Communications within the area of responsibility are clear and effective  Cargo operations are carried out in accordance with accepted principles and procedures to ensure safety of operations

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to the safe operation of a liquefied gas tanker (continued)	.4 chemical symbols  Knowledge and understanding of tanker safety culture and safety management		
Take precautions to prevent hazards	Basic knowledge of the hazards associated with tanker operations, including:  1 health hazards 2 environmental hazards 3 reactivity hazards 4 corrosion hazards 5 explosion and flammability hazards 6 sources of ignition 7 electrostatic hazards 8 toxicity hazards 9 vapour leaks and clouds 10 extremely low temperatures 11 pressure hazards Basic knowledge of hazard controls: 1 inerting, drying and monitoring techniques 2 anti-static measures 3 ventilation 4 segregation 5 cargo inhibition	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training 4 approved training programme	Correctly identifies, on an MSDS, relevant cargo-related hazards to the vessel and to personnel, and takes the appropriate actions in accordance with established procedures  Identification and actions on becoming aware of a hazardous situation conform to established procedures in line with best practice
-	.6 importance of cargo compatibility		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Take precautions to prevent hazards (continued)	.7 atmospheric control .8 gas testing Understanding of information on a Material Safety Data Sheet (MSDS)	Exercise tion and	
Apply occupational health and safety precautions and measures	Function and proper use of gas-measuring instruments and similar equipment  Proper use of safety equipment and protective devices, including:  1 breathing apparatus and tank evacuating equipment  2 protective clothing and equipment  3 resuscitators  4 rescue and escape equipment  Basic knowledge of safe working practices and procedures in accordance with legislation and industry guidelines and personal shipboard safety relevant to liquefied gas tankers, including:  1 precautions to be taken when entering enclosed spaces  2 precautions to be taken before and during repair and maintenance work  3 safety measures for hot and cold work  4 electrical safety  5 ship/shore safety checklist	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training 4 approved training programme	Procedures for entry into enclosed spaces are observed Procedures and safe working practices designed to safeguard personnel and the ship are observed at all times Appropriate safety and protective equipment is correctly used

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Apply occupational health and safety precautions and measures (continued)	Basic knowledge of first aid with reference to a Material Safety Data Sheet (MSDS)		First aid do's and don'ts
Carry out fire-fighting operations	Tanker fire organization and action to be taken  Special hazards associated with cargo handling and transportation of liquefied gases in bulk  Fire-fighting agents used to extinguish gas fires  Fixed fire-fighting foam system operations  Portable fire-fighting foam operations  Fixed dry chemical system operations  Basic knowledge of spill containment in relation to fire-fighting operations	Practical exercises and instruction conducted under approved and truly realistic training conditions (e.g. simulated shipboard conditions) and, whenever possible and practicable, in darkness	Initial actions and follow-up actions on becoming aware of an emergency conform with established practices and procedures  Action taken on identifying muster signals is appropriate to the indicated emergency and complies with established procedures  Clothing and equipment are appropriate to the nature of the fire-fighting operations  The timing and sequence of individual actions are appropriate to the prevailing circumstances and conditions  Extinguishment of fire is achieved using appropriate procedures, techniques and fire-fighting agents
Respond to emergencies	Basic knowledge of emergency procedures, including emergency shutdown	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training 4 approved training programme	The type and impact of the emergency is promptly identified and the response actions conform to the emergency procedures and contingency plans

competence  Take Basic knowledge of the Examination and Proce	Criteria for
	aluating competence
effects of pollution on human assessment of evidence safegu	dures designed to lard the environment are led at all times

 $Table \ A-V/l-2-2$  Specification of minimum standard of competence in advanced training for liquefied gas tanker cargo operations

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Ability to safely perform and monitor all cargo operations	Design and characteristics of a liquefied gas tanker  Knowledge of liquefied gas tanker design, systems, and equipment, including:  1 types of liquefied gas tankers and cargo tanks construction  2 general arrangement and construction  3 cargo containment systems, including materials of construction and insulation  4 cargo-handling equipment and instrumentation, including:  1 cargo pumps and pumping arrangements  2 cargo pipelines and valves  3 expansion devices  4 flame screens  5 temperature monitoring systems  6 cargo tank level-gauging systems  7 tank pressure monitoring and control systems  5 cargo temperature maintenance system	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience  2 approved training ship experience  3 approved simulator training  4 approved training programme	Communications are clear, understood and successful  Cargo operations are carried out in a safe manner, taking into account liquefied gas tanker designs, systems and equipment  Pumping operations are carried out in accordance with accepted principles and procedures and are relevant to the type of cargo  Cargo operations are planned, risk is managed and carried out in accordance with accepted principles and procedures to ensure safety of operations and avoid pollution of the marine environment

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Ability to safely perform and monitor all cargo operations (continued)	.6 tank atmosphere control systems (inert gas, nitrogen), including storage, generation and distribution systems		
	.7 cofferdam heating systems		
	.8 gas-detecting systems		
	.9 ballast system		
	.10 boil-off systems		
	.11 reliquefaction systems		
	.12 cargo Emergency Shut Down system (ESD)		
	.13 custody transfer system		-
•	Knowledge of pump theory and characteristics, including types of cargo pumps and their safe operation		
	Loading, unloading, care and handling of cargo		
	Knowledge of the effect of bulk liquid cargoes on trim and stability and structural integrity		Proper loading, stowage and unloading of liquefied gas cargoes ensures that stability and stress conditions remain within safe limits at all times
	Proficiency in tanker safety culture and implementation of safety management requirements		Potential non-compliance with cargo-related procedures is promptly identified and rectified
	, oqui omorro		Actions taken and procedures followed correctly identify and make full use of appropriate shipboard equipment

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Ability to safely perform and monitor all cargo operations (continued)	Proficiency to apply safe preparations, procedures and checklists for all cargo operations, including:  1 post docking and loading:		Calibration and use of monitoring and gas-detection equipment is consistent with safe operational practices and procedures
	.1 tank inspection .2 inerting	·	Procedures for monitoring and safety systems ensure that all alarms are detected promptly and acted upon in accordance with established procedures
*,	.2 sea passage:  .1 cooling down .2 pressure maintenance .3 boil-off .4 inhibiting	·	
The state of the s	.3 unloading:  .1 unloading .2 ballasting .3 stripping and cleaning systems .4 systems to make the tank liquid-free		
	.4 pre-docking preparation:  .1 warm-up .2 inerting .3 gas-freeing		
	.5 ship-to-ship transfer		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
	Proficiency to perform cargo measurements and calculations, including:  1 liquid phase 2 gas phase 3 On Board Quantity (OBQ) 4 Remain On Board (ROB) 5 boil-off cargo calculations Proficiency to manage and supervise personnel with cargo-related responsibilities		Personnel are allocated duties and informed of procedures and standards of work to be followed, in a manner appropriate to the individuals concerned and in accordance with safe operational practices
Familiarity with physical and chemical properties of liquefied gas cargoes	Knowledge and understanding of basic chemistry and physics and the relevant definitions related to the safe carriage of liquefied gases in bulk in ships, including:  1 the chemical structure of gases  2 the properties and characteristics of liquefied gases (including CO <sub>2</sub> ) and their vapours, including:  1 simple gas laws  2 states of matter  3 liquid and vapour densities  4 diffusion and mixing of gases  5 compression of gases  6 reliquefaction and refrigeration of gases	Examination and assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training 4 approved training programme	Effective use is made of information resources for identification of properties and characteristics of liquefied gases and their impact on safety, environmental protection and vessel operation

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Familiarity with physical and chemical properties of liquefied gas cargoes (continued)	.7 critical temperature of gases and pressure  .8 flashpoint, upper and lower explosive limits, auto-ignition temperature  .9 compatibility, reactivity and positive segregation of gases  .10 polymerization  .11 saturated vapour		
	pressure/reference temperature  .12 dewpoint and bubble point  .13 lubrication of compressors  .14 hydrate formation		
	<ul><li>.3 the properties of single liquids</li><li>.4 the nature and properties of solutions</li></ul>		
	.5 thermodynamic units .6 basic thermodynamic laws and diagrams	we she many the many that the state of the s	
	.7 properties of materials  .8 effect of low temperature – brittle fracture	The second secon	
	Understanding the information contained in a Material Safety Data Sheet (MSDS)	-	

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Take precautions to prevent hazards	Knowledge and understanding of the hazards and control measures associated with liquefied gas tanker cargo operations, including:  1 flammability 2 explosion 3 toxicity 4 reactivity	Examination and assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 approved training ship experience  .3 approved simulator training	Relevant cargo-related hazards to the vessel and to personnel associated with liquefied gas tanker cargo operations are correctly identified, and proper control measures are taken
	.5 corrosivity .6 health hazards .7 inert gas composition .8 electrostatic hazards .9 polymerizing cargoes Proficiency to calibrate and use monitoring and gas-detection systems, instruments and equipment Knowledge and understanding of dangers of non-compliance with relevant rules/regulations	.4 approved training programme	Use of gas-detection devices is in accordance with manuals and good practice
Apply occupational health and safety precautions	Knowledge and understanding of safe working practices, including risk assessment and personal shipboard safety relevant to liquefied gas tankers, including:  I precautions to be taken when entering enclosed spaces (such as compressor rooms), including the correct use of different types of breathing apparatus	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training 4 approved training programme	Procedures designed to safeguard personnel and the ship are observed at all times  Safe working practices are observed and appropriate safety and protective equipment is correctly used  Working practices are in accordance with legislative requirements, codes of practice, permits to work and environmental concerns  Correct use of breathing apparatus

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Apply occupational health and safety precautions (continued)	<ul> <li>.2 precautions to be taken before and during repair and maintenance work, including work affecting pumping, piping, electrical and control systems</li> <li>.3 precautions for hot and cold work</li> <li>.4 precautions for electrical safety</li> <li>.5 use of appropriate Personal</li> </ul>		
The state of the s	Protective Equipment (PPE)  .6 precautions for cold burn and frostbite  .7 proper use of personal toxicity monitoring equipment		
Respond to emergencies	Knowledge and understanding of liquefied gas tanker emergency procedures, including:  1 ship emergency response plans 2 cargo operations emergency shutdown procedure 3 emergency cargo valve operations 4 actions to be taken in the event of failure of systems or services essential to cargo operations 5 fire-fighting on liquefied gas tankers 6 jettisoning of cargo 7 enclosed space rescue	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience 2 approved training ship experience 3 approved simulator training 4 approved training programme	The type and impact of emergency is promptly identified and the response actions conform with established emergency procedures and contingency plans  The order of priority and the levels and timescales of making reports and informing personnel on board are relevant to the nature of the emergency and reflect the urgency of the problem  Evacuation, emergency shutdown and isolation are appropriate to the nature of the emergency and implemented promptly

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Respond to emergencies (continued)	Actions to be taken following collision, grounding or spillage and envelopment of the ship in toxic or flammable vapour	<del>.</del>	
	Knowledge of medical first-aid procedures and antidotes on board liquefied gas tankers, with reference to the Medical First Aid Guide for Use in Accidents involving Dangerous Goods (MFAG)		The identification of and actions taken in a medical emergency conform to current recognized first aid practice and international guidelines
Take precautions to prevent pollution of the environment	Understanding of procedures to prevent pollution of the environment	Assessment of evidence obtained from one or more of the following:  1 approved in-service experience	Operations are conducted in accordance with accepted principles and procedures to prevent pollution of the environment
		.2 approved training ship experience .3 approved simulator training .4 approved training	
Monitor and control compliance with legislative requirements	Knowledge and understanding of relevant provisions of the International Convention for the Prevention of Pollution from Ships (MARPOL) and other relevant IMO instruments, industry guidelines and port regulations as commonly applied	programme  Assessment of evidence obtained from one or more of the following:  .1 approved in-service experience  .2 approved training ship experience	The handling of liquefied gas cargoes complies with relevant IMO instruments and established industrial standards and codes of safe working practices
	Proficiency in the use of the IBC and IGC Codes and related documents	.3 approved simulator training .4 approved training programme	

#### Section A-V/2

Mandatory minimum requirements for the training and qualification of masters, officers, ratings and other personnel on passenger ships

#### Crowd management training

- The crowd management training required by regulation V/2, paragraph 4 for personnel designated on muster lists to assist passengers in emergency situations shall include, but not necessarily be limited to:
  - .1 awareness of life-saving appliance and control plans, including:
    - .1.1 knowledge of muster lists and emergency instructions;
    - .1.2 knowledge of the emergency exits; and
    - .1.3 restrictions on the use of elevators;
  - .2 the ability to assist passengers en route to muster and embarkation stations, including:
    - .2.1 the ability to give clear reassuring orders;
    - .2.2 the control of passengers in corridors, staircases and passageways;
    - .2.3 maintaining escape routes clear of obstructions;
    - .2.4 methods available for evacuation of disabled persons and persons needing special assistance; and
    - .2.5 search of accommodation spaces;
  - .3 mustering procedures, including:
    - .3.1 the importance of keeping order;
    - .3.2 the ability to use procedures for reducing and avoiding panic;
    - .3.3 the ability to use, where appropriate, passenger lists for evacuation counts;
    - .3.4 the ability to ensure that the passengers are suitably clothed and have donned their lifejackets correctly.

# Safety training for personnel providing direct service to passengers in passenger spaces

2 The additional safety training required by regulation V/2, paragraph 5, shall at least ensure attainment of the abilities as follows:

#### Communication

- .1 Ability to communicate with passengers during an emergency, taking into account:
  - .1.1 the language or languages appropriate to the principal nationalities of passengers carried on the particular route;
  - the likelihood that an ability to use an elementary English vocabulary for basic instructions can provide a means of communicating with a passenger in need of assistance whether or not the passenger and crew member share a common language;
  - .1.3 the possible need to communicate during an emergency by some other means, such as by demonstration, or hand signals, or calling attention to the location of instructions, muster stations, life-saving devices or evacuation routes, when oral communication is impractical;
  - .1.4 the extent to which complete safety instructions have been provided to passengers in their native language or languages; and
  - .1.5 the languages in which emergency announcements may be broadcast during an emergency or drill to convey critical guidance to passengers and to facilitate crew members in assisting passengers.

## Life-saving appliances

.2 Ability to demonstrate to passengers the use of personal life-saving appliances.

## Embarkation procedures

.3 Embarking and disembarking passengers, with special attention to disabled persons and persons needing assistance.

## Crisis management and human behaviour training

- Masters, chief engineer officers, chief mates, second engineer officers and any person having responsibility for the safety of passengers in emergency situations shall:
  - .1 have successfully completed the approved crisis management and human behaviour training required by regulation V/2, paragraph 6, in accordance with their capacity, duties and responsibilities as set out in table A-V/2; and
  - .2 be required to provide evidence that the required standard of competence has been achieved in accordance with the methods and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-V/2.

#### Passenger safety, cargo safety and hull integrity training

The passenger safety, cargo safety and hull integrity training required by regulation V/2, paragraph 7, for masters, chief mates, chief engineer officers, second engineer officers and persons assigned immediate responsibility for embarking and disembarking passengers, for loading, discharging or securing cargo or for closing hull openings on board ro-ro passenger ships shall at least ensure attainment of the abilities that are appropriate to their duties and responsibilities as follows:

#### Loading and embarkation procedures

- .1 Ability to apply properly the procedures established for the ship regarding:
  - .1.1 loading and discharging vehicles, rail cars and other cargo transport units, including related communications;
  - .1.2 lowering and hoisting ramps;
  - .1.3 setting up and stowing retractable vehicle decks; and
  - .1.4 embarking and disembarking passengers, with special attention to disabled persons and persons needing assistance.

## Carriage of dangerous goods

Ability to apply any special safeguards, procedures and requirements regarding the carriage of dangerous goods on board ro-ro passenger ships.

## Securing cargoes

- .3 Ability to:
  - .3.1 apply correctly the provisions of the Code of Safe Practice for Cargo Stowage and Securing to the vehicles, rail cars and other cargo transport units carried; and
  - .3.2 use properly the cargo-securing equipment and materials provided, taking into account their limitations.

## Stability, trim and stress calculations

- .4 Ability to:
  - .4.1 make proper use of the stability and stress information provided;
  - .4.2 calculate stability and trim for different conditions of loading, using the stability calculators or computer programs provided;
  - .4.3 calculate load factors for decks; and

.4.4 calculate the impact of ballast and fuel transfers on stability, trim and stress.

Opening, closing and securing hull openings

## .5 Ability to:

- .5.1 apply properly the procedures established for the ship regarding the opening, closing and securing of bow, stern and side doors and ramps and to correctly operate the associated systems; and
- .5.2 conduct surveys on proper sealing.

#### Ro-ro deck atmosphere

- .6 Ability to:
  - .6.1 use equipment, where carried, to monitor atmosphere in ro-ro spaces; and
  - apply properly the procedures established for the ship for ventilation of ro-ro spaces during loading and discharging of vehicles, while on voyage and in-emergencies.

 ${\it Table A-V/2} \\ {\it Specification of minimum standard of competence in crisis management} \\ {\it and human behaviour} \\$ 

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Organize shipboard emergency procedures	Knowledge of:  1 the general design and layout of the ship 2 safety regulations	Assessment of evidence obtained from approved training, exercises with one or more prepared emergency plans and practical demonstration	The shipboard emergency procedures ensure a state of readiness to respond to emergency situations
-	.3 emergency plans and procedures	,	
	The importance of the principles for the development of ship-specific emergency procedures, including:	-	
-	.1 the need for pre-planning and drills of shipboard emergency procedures		
	the need for all personnel to be aware of and adhere to pre-planned emergency procedures as carefully as possible in the event of an emergency situation		
Optimize the use of resources	Ability to optimize the use of resources, taking into account:	Assessment of evidence obtained from approved training, practical	Contingency plans optimize the use of available resources
	.1 the possibility that resources available in an emergency may be limited	demonstration and shipboard training and drills of emergency procedures	Allocation of tasks and responsibilities reflects the known competence of individuals
	.2 the need to make full use of personnel and equipment immediately available and, if necessary, to improvise		Roles and responsibilities of teams and individuals are clearly defined
-	Ability to organize realistic drills to maintain a state of readiness, taking into account lessons learnt from previous accidents involving passenger ships; debriefing after drills		-

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Control response to emergencies	Ability to make an initial assessment and provide an effective response to emergency situations in accordance with established emergency procedures  Leadership skills  Ability to lead and direct others in emergency situations, including the need:  1 to set an example during emergency situations  2 to focus decision making, given the need to act quickly in an emergency  3 to motivate, encourage and reassure passengers and other personnel  Stress handling  Ability to identify the development of symptoms of excessive personal stress and those of other members of the ship's emergency team  Understanding that stress generated by emergency situations can affect the performance of individuals and their ability to act on instructions and follow procedures	Assessment of evidence obtained from approved training, practical demonstration and shipboard training and drills of emergency procedures	Procedures and actions are in accordance with established principles and plans for crisis management on board  Objectives and strategy are appropriate to the nature of the emergency, take account of contingencies and make optimum use of available resources  Actions of crew members contribute to maintaining order and control
Control passengers and other personnel during emergency situations	Human behaviour and responses  Ability to control passengers and other personnel in emergency situations, including:	Assessment of evidence obtained from approved training, practical demonstration and shipboard training and drills of emergency procedures	Actions of crew members contribute to maintaining order and control

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Control passengers and other personnel during emergency situations (continued)	.1 awareness of the general reaction patterns of passengers and other personnel in emergency situations, including the possibility that:	,	-
	.1.1 generally it takes some time before people accept the fact that there is an emergency situation		
	1.2 some people may panic and not behave with a normal level of rationality, that their ability to comprehend may be impaired and they may not be as responsive to instructions as in non-emergency situations		
	.2 awareness that passengers and other personnel may, inter alia:		
	.2.1 start looking for relatives, friends and/or their belongings as a first reaction when something goes wrong	•	
	.2.2 seek safety in their cabins or in other places on board where they think that they can escape danger	-	·
-	.2.3 tend to move to the upper side when the ship is listing	-	
	.3 appreciation of the possible problem of panic resulting from separating families		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Establish and maintain effective communications	Ability to establish and maintain effective communications, including:  1 the importance of clear and concise instructions and reports  2 the need to encourage an exchange of information with, and feedback from, passengers and other personnel  Ability to provide relevant information to passengers and other personnel during an emergency situation, to keep them apprised of the overall situation and to communicate any action required of them, taking into account:  1 the language or languages appropriate to the principa nationalities of passengers and other personnel carried on the particular route  2 the possible need to communicate during an emergency by some other means, such as by demonstration, or by hand signals or calling attention to the location of instructions, muster stations, life-saving devices or evacuation routes, where oral communication is impractical  3 the language in which emergency announcements may be broadcast during an emergency or drill to convey critical guidance to passengers and to facilitate crew members in assisting passengers		Information from all available sources is obtained, evaluated and confirmed as quickly as possible and reviewed throughout the emergency Information given to individuals, emergency response teams and passengers is accurate, relevant and timely Information keeps passengers informed as to the nature of the emergency and the actions required of them

#### CHAPTER VI

# Standards regarding emergency, occupational safety, security, medical care and survival functions

#### Section A-VI/1

Mandatory minimum requirements for safety familiarization, basic training and instruction for all seafarers

#### Safety familiarization training

- Before being assigned to shipboard duties, all persons employed or engaged on a seagoing ship, other than passengers, shall receive approved familiarization training in personal survival techniques or receive sufficient information and instruction, taking account of the guidance given in part B, to be able to:
  - .1 communicate with other persons on board on elementary safety matters and understand safety information symbols, signs and alarm signals;
  - .2 know what to do if:
    - .2.1 a person falls overboard,
    - .2.2 fire or smoke is detected, or
    - .2.3 the fire or abandon ship alarm is sounded;
  - .3 identify muster and embarkation stations and emergency escape routes;
  - .4 locate and don lifejackets;
  - .5 raise the alarm and have basic knowledge of the use of portable fire extinguishers;
  - .6 take immediate action upon encountering an accident or other medical emergency before seeking further medical assistance on board; and
  - .7 close and open the fire, weathertight and watertight doors fitted in the particular ship other than those for hull openings.

#### Basic training

- 2 Seafarers employed or engaged in any capacity on board ship on the business of that ship as part of the ship's complement with designated safety or pollution-prevention duties in the operation of the ship shall, before being assigned to any shipboard duties:
  - .1 receive appropriate approved basic training or instruction in:
  - .1.1 personal survival techniques as set out in table A-VI/1-1,
  - .1.2 fire prevention and fire fighting as set out in table A-VI/1-2,

The relevant IMO Model Course(s) may assist in the preparation of courses.

- .1.3 elementary first aid as set out in table A-VI/1-3, and
- .1.4 personal safety and social responsibilities as set out in table A-VI/1-4;
- be required to provide evidence of having achieved the required standard of competence to undertake the tasks, duties and responsibilities listed in column 1 of tables A-VI/1-1, A-VI/1-2, A-VI/1-3 and A-VI/1-4 through:
  - .2.1 demonstration of competence, in accordance with the methods and the criteria for evaluating competence tabulated in columns 3 and 4 of those tables, and
  - .2.2 examination or continuous assessment as part of an approved training programme in the subjects listed in column 2 of those tables.
- 3 Seafarers qualified in accordance with paragraph 2 in basic training shall be required, every five years, to provide evidence of having maintained the required standard of competence, to undertake the tasks, duties and responsibilities listed in column 1 of tables A-VI/1-1 and A-VI/1-2.
- 4 Parties may accept onboard training and experience for maintaining the required standard of competence in the following areas:
  - .1 personal survival techniques as set out in table A-VI/1-1:
    - .1.1 don a lifejacket;
    - .1.2 board a survival craft from the ship, while wearing a lifejacket;
    - .1.3 take initial actions on boarding a lifeboat to enhance chance of survival;
    - .1.4 stream a lifeboat drogue or sea-anchor;
    - .1.5 operate survival craft equipment; and
    - .1.6 operate location devices, including radio equipment;
  - .2 fire prevention and fire fighting as set out in table A-VI/1-2:
    - .2.1 use self-contained breathing apparatus; and
    - .2.2 effect a rescue in a smoke-filled space, using an approved smoke-generating device aboard, while wearing a breathing apparatus.

#### Exemptions

The Administration may, in respect of ships other than passenger ships of more than 500 gross tonnage engaged on international voyages and tankers, if it considers that a ship's size and the length or character of its voyage are such as to render the application of the full requirements of this section unreasonable or impracticable, exempt to that extent the seafarers on such a ship or class of ships from some of the requirements, bearing in mind the safety of people on board, the ship and property and the protection of the marine environment.

 $Table \ A-VI/I-I$  Specification of minimum standard of competence in personal survival techniques

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Survive at sea in the event of ship abandonment	Types of emergency situations which may occur, such as collision, fire, foundering  Types of life-saving appliances normally carried on ships  Equipment in survival craft  Location of personal life-saving appliances  Principles concerning survival, including:  1 value of training and drills  2 personal protective clothing and equipment  3 need to be ready for any emergency  4 actions to be taken when called to survival craft stations  5 actions to be taken when required to abandon ship  6 actions to be taken when in the water  7 actions to be taken when aboard a survival craft  8 main dangers to survivors	Assessment of evidence obtained from approved instruction or during attendance at an approved course or approved in-service experience and examination, including practical demonstration of competence to:  1 don a lifejacket  2 don and use an immersion suit  3 safely jump from a height into the water  4 right an inverted liferaft while wearing a lifejacket  5 swim while wearing a lifejacket  6 keep afloat without a lifejacket  7 board a survival craft from the ship and water while wearing a lifejacket  8 take initial actions on boarding survival craft to enhance chance of survival  9 stream a drogue or sea-anchor  10 operate survival craft equipment  11 operate location devices, including radio equipment	Action taken on identifying muster signals is appropriate to the indicated emergency and complies with established procedures  The timing and sequence of individual actions are appropriate to the prevailing circumstance and conditions and minimize potential dangers and threats to survival  Method of boarding survival craft is appropriate and avoids dangers to other survivors  Initial actions after leaving the ship and procedures and actions in water minimize threats to survival

Table A-VI/1-2 Specification of minimum standard of competence in fire prevention and fire fighting

Column 1	Column 2	Column 3	Column 4
	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Minimize the risk of fire and maintain a state of readiness to	Shipboard fire-fighting organization  Location of fire-fighting	Assessment of evidence obtained from approved instruction or attendance at an approved course	Initial actions on becoming aware of an emergency conform with accepted practices and procedures
respond to emergency situations	appliances and emergency escape routes		Action taken on identifying muster signals is appropriate to the indicated emergency
involving fire	The elements of fire and explosion (the fire triangle)		and complies with established procedures
	Types and sources of ignition		
	Flammable materials, fire hazards and spread of fire		
	The need for constant vigilance		
	Actions to be taken on board ship		
·	Fire and smoke detection and automatic alarm systems		•
	Classification of fire and applicable extinguishing agents		
Fight and extinguish fires	Fire-fighting equipment and its location on board	obtained from approved instruction or during	Clothing and equipment are appropriate to the nature of the fire-fighting operations
	Instruction in: .1 fixed installations	attendance at an approved course, including practical demonstration in spaces	The timing and sequence of individual actions are
	.1 fixed installations .2 fire-fighter's outfits	which provide truly realistic training conditions (e.g., simulated shipboard	appropriate to the prevailing circumstances and conditions
	.3 personal equipment	conditions) and, whenever possible and practical, in	Extinguishment of fire is achieved using appropriate
	.4 fire-fighting appliances and equipment	darkness, of the ability to:  .1 use various types of	procedures, techniques and fire-fighting agents
•	.5 fire-fighting methods	portable fire extinguishers	Breathing apparatus procedures and techniques comply with accepted
	.6 fire-fighting agents	.2 use self-contained breathing apparatus	practices and procedures
	.7 fire-fighting procedures		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Fight and extinguish fires (continued)	.8 use of breathing apparatus for fighting fires and effecting rescues	.3 extinguish smaller fires, e.g., electrical fires, oil fires, propane fires	
		.4 extinguish extensive fires with water, using jet and spray nozzles	
		.5 extinguish fires with foam, powder or any other suitable chemical agent	
		.6 enter and pass through, with lifeline but without breathing apparatus, a compartment into which high-expansion foam has been injected	
-		.7 fight fire in smoke-filled enclosed spaces wearing self-contained breathing apparatus	
		.8 extinguish fire with water fog or any other suitable fire-fighting agent in an accommodation room or simulated engine-room with fire and heavy smoke	
		.9 extinguish oil fire with fog applicator and spray nozzles, dry chemical powder or foam applicators	
		.10 effect a rescue in a smoke-filled space wearing breathing apparatus	

Table A-VI/1-3
Specification of minimum standard of competence in elementary first aid

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Take immediate action upon encountering an accident or other medical emergency	Assessment of needs of casualties and threats to own safety  Appreciation of body structure and functions  Understanding of immediate measures to be taken in cases of emergency, including the ability to:  1 position casualty 2 apply resuscitation techniques 3 control bleeding 4 apply appropriate measures of basic shock management 5 apply appropriate measures in event of burns and scalds, including accidents caused by electric current 6 rescue and transport a casualty 7 improvise bandages and use materials in the emergency kit	Assessment of evidence obtained from approved instruction or during attendance at an approved course	The manner and timing of raising the alarm is appropriate to the circumstances of the accident or medical emergency  The identification of probable cause, nature and extent of injuries is prompt and complete and the priority and sequence of actions is proportional to any potential threat to life  Risk of further harm to self and casualty is minimized at all times

Table A-VI/1-4
Specification of minimum standard of competence in personal safety and social responsibilities

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Comply with emergency procedures	Types of emergency which may occur, such as collision, fire, foundering  Knowledge of shipboard contingency plans for response to emergencies  Emergency signals and specific duties allocated to crew members in the muster list; muster stations; correct use of personal safety equipment  Action to take on discovering potential emergency, including fire, collision, foundering and ingress of water into the ship  Action to take on hearing emergency alarm signals  Value of training and drills  Knowledge of escape routes and internal communication and alarm systems	Assessment of evidence obtained from approved instruction or during attendance at an approved course	Initial action on becoming aware of an emergency conforms to established emergency response procedures  Information given on raising alarm is prompt, accurate, complete and clear
Take precautions to prevent pollution of the marine environment	Basic knowledge of the impact of shipping on the marine environment and the effects of operational or accidental pollution on it  Basic environmental	Assessment of evidence obtained from approved instruction or during attendance at an approved course	Organizational procedures designed to safeguard the marine environment are observed at all times
	protection procedures  Basic knowledge of complexity and diversity of the marine environment		-

Column 2	Column 3	Column 4
Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Importance of adhering to safe working practices at all times  Safety and protective devices available to protect against potential hazards aboard ship  Precautions to be taken prior to entering enclosed spaces  Familiarization with international measures concerning accident prevention and occupational health*	Assessment of evidence obtained from approved instruction or during attendance at an approved course	Safe working practices are observed and appropriate safety and protective equipment is correctly used at all times
Understand the principles of, and barriers to, effective communication between individuals and teams within the ship	Assessment of evidence obtained from approved instruction or during attendance at an approved course	Communications are clear and effective at all times
Ability to establish and maintain effective communications		
Importance of maintaining good human and working relationships aboard ship  Basic teamworking principles and practice, including conflict resolution  Social responsibilities; employment conditions; individual rights and	Assessment of evidence obtained from approved instruction or during attendance at an approved course	Expected standards of work and behaviour are observed at all times
	Importance of adhering to safe working practices at all times  Safety and protective devices available to protect against potential hazards aboard ship  Precautions to be taken prior to entering enclosed spaces  Familiarization with international measures concerning accident prevention and occupational health  Understand the principles of, and barriers to, effective communication between individuals and teams within the ship  Ability to establish and maintain effective communications  Importance of maintaining good human and working relationships aboard ship  Basic teamworking principles and practice, including conflict resolution  Social responsibilities; employment conditions;	Knowledge, understanding and proficiency  Importance of adhering to safe working practices at all times  Safety and protective devices available to protect against potential hazards aboard ship  Precautions to be taken prior to entering enclosed spaces  Familiarization with international measures concerning accident prevention and occupational health.  Understand the principles of, and barriers to, effective communication between individuals and teams within the ship  Ability to establish and maintain effective communications  Importance of maintaining good human and working relationships aboard ship  Basic teamworking principles and practice, including conflict resolution  Social responsibilities; employment conditions; individual rights and obligations; dangers of drug

The ILO Code of Practice on "Accident Prevention on Board Ship at Sea and in Port" may be of assistance in the preparation of courses.

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Understand and take necessary actions to control fatigue	Importance of obtaining the necessary rest  Effects of sleep, schedules, and the circadian rhythm on fatigue  Effects of physical stressors on seafarers  Effects of environmental stressors in and outside the ship and their impact on seafarers  Effects of schedule changes on seafarer fatigue	Assessment of evidence obtained from approved instruction or during attendance at an approved course	Fatigue management practices are observed and appropriate actions are used at all times

Mandatory minimum requirements for the issue of certificates of proficiency in survival craft, rescue boats and fast rescue boats

## PROFICIENCY IN SURVIVAL CRAFT AND RESCUE BOATS OTHER THAN FAST RESCUE BOATS

- Every candidate for a certificate of proficiency in survival craft and rescue boats other than fast rescue boats shall be required to demonstrate competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-VI/2-1.
- The level of knowledge of the subjects listed in column 2 of table A-VI/2-1 shall be sufficient to enable the candidate to launch and take charge of a survival craft or rescue boat in emergency situations.
- Training and experience to achieve the necessary level of theoretical knowledge, understanding and proficiency shall take account of the guidance given in part B of this Code.
- Every candidate for certification shall be required to provide evidence of having achieved the required standard of competence through:
  - demonstration of competence to undertake the tasks, duties and responsibilities .1 listed in column 1 of table A-VI/2-1, in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of that table; and
  - examination or continuous assessment as part of an approved training programme .2 covering the material set out in column 2 of table A-VI/2-1.
- Seafarers qualified in accordance with paragraph 4 in survival craft and rescue boats other than fast rescue boats shall be required, every five years, to provide evidence of having maintained the required standards of competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-VI/2-1.
- Parties may accept onboard training and experience for maintaining the required standard of competence of table A-VI/2-1 in the following areas:
  - take charge of a survival craft or rescue boat during and after launch: .1
    - interpret the markings on survival craft as to the number of persons they .1.1 are intended to carry;
    - give correct commands for launching and boarding survival craft, clearing .1.2the ship and handling and disembarking persons from survival craft;
    - prepare and safely launch survival craft and clear the ship's side quickly; and .1.3
    - safely recover survival craft and rescue boats; .1.4

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

- .2 manage survivors and survival craft after abandoning ship:
  - .2.1 row and steer a boat and steer by compass;
  - .2.2 use individual items of equipment of survival crafts, except for pyrotechnics; and
  - .2.3 rig devices to aid location;
- .3 use locating devices, including communication and signalling apparatus:
  - .3.1 use of portable radio equipment for survival craft; and
- .4 apply first aid to survivors.

#### PROFICIENCY IN FAST RESCUE BOATS

- Every candidate for a certificate of proficiency in fast rescue boats shall be required to demonstrate competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-VI/2-2.
- 8 The level of knowledge of the subjects listed in column 2 of table A-VI/2-2 shall be sufficient to enable the candidate to launch and take charge of a fast rescue boat in emergency situations.
- Training and experience to achieve the necessary level of theoretical knowledge, understanding and proficiency shall take account of the guidance given in part B of this Code.
- 10 Every candidate for certification shall be required to provide evidence of having achieved the required standard of competence through:
  - .1 demonstration of competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-VI/2-2, in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of that table; and
  - .2 examination or continuous assessment as part of an approved training programme covering the material set out in column 2 of table A-VI/2-2.
- Seafarers qualified in accordance with paragraph 10 in fast rescue boats shall be required, every five years, to provide evidence of having maintained the required standards of competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-VI/2-2.

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

- Parties may accept onboard training and experience for maintaining the required standard of competence of table A-VI/2-2, in the following areas:
  - .I Take charge of a fast rescue boat during and after launch:
    - .1.1 control safe launching and recovery of a fast rescue boat;
    - .1.2 handle a fast rescue boat in prevailing weather and sea conditions;
    - .1.3 use communications and signalling equipment between the fast rescue boat and a helicopter and a ship;
    - .1.4 use the emergency equipment carried; and
    - .1.5 carry out search patterns, taking account of environmental factors.

 $Table \ A-VI/2-I$  Specification of the minimum standard of competence in survival craft and rescue boats other than fast rescue boats

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Take charge of a survival craft or rescue boat during and after launch	Construction and outfit of survival craft and rescue boats and individual items of their equipment  Particular characteristics and facilities of survival craft and rescue boats  Various types of device used for launching survival craft and rescue boats  Methods of launching survival craft into a rough sea  Methods of recovering survival craft  Action to be taken after leaving the ship  Methods of launching and recovering rescue boats in a rough sea  Dangers associated with use of on-load release devices  Knowledge of maintenance procedures	Assessment of evidence obtained from practical demonstration of ability to:  1 right an inverted liferaft while wearing a lifejacket  2 interpret the markings on survival craft as to the number of persons they are intended to carry  3 give correct commands for launching and boarding survival craft, clearing the ship and handling and disembarking persons from survival craft  4 prepare and safely launch survival craft and clear the ship's side quickly and operate off-load and on-load release devices  5 safely recover survival craft and rescue boats, including the proper resetting of both off-load and on-load release devices  using: inflatable liferaft and open or enclosed lifeboat with inboard engine or approved simulator training, where appropriate	Preparation, boarding and launching of survival craft are within equipment limitations and enable survival craft to clear the ship safely  Initial actions on leaving the ship minimize threat to survival  Recovery of survival craft and rescue boats is within equipment limitations  Equipment is operated in accordance with manufacturers' instructions for release and resetting
Operate a survival craft engine	Methods of starting and operating a survival craft engine and its accessories together with the use of the fire extinguisher provided	Assessment of evidence obtained from practical demonstration of ability to start and operate an inboard engine fitted in an open or enclosed lifeboat	Propulsion is available and maintained as required for manoeuvring

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Manage survivors and survival craft after abandoning ship	Handling survival craft in rough weather  Use of painter, sea-anchor and all other equipment  Apportionment of food and water in survival craft  Action taken to maximize detectability and location of survival craft  Method of helicopter rescue  Effects of hypothermia and its prevention; use of protective covers and garments, including immersion suits and thermal protective aids  Use of rescue boats and motor lifeboats for marshalling liferafts and rescue of survivors and persons in the sea  Beaching survival craft	Assessment of evidence obtained from practical demonstration of ability to:  1 row and steer a boat and steer by compass  2 use individual items of equipment of survival craft  3 rig devices to aid location	Survival management is appropriate to prevailing circumstances and conditions
Use locating devices, including communication and signalling apparatus and pyrotechnics	Radio life-saving appliances carried in survival craft, including satellite EPIRBs and SARTs  Pyrotechnic distress signals	Assessment of evidence obtained from practical demonstration of ability to:  1 use portable radio equipment for survival craft  2 use signalling equipment, including pyrotechnics	Use and choice of communication and signalling apparatus is appropriate to prevailing circumstances and conditions

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Apply first aid to survivors	Use of the first-aid kit and resuscitation techniques  Management of injured persons, including control of bleeding and shock	Assessment of evidence obtained from practical demonstration of ability to deal with injured persons both during and after abandonment, using first-aid kit and resuscitation techniques	Identification of the probable cause, nature and extent of injuries or condition is prompt and accurate  Priority and sequence of treatment minimizes any threat to life

 ${\it Table~A-VI/2-2}$  Specification of the minimum standard of competence in fast rescue boats

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Understand the construction, maintenance, repair and outfitting of fast rescue boats	Construction and outfitting of fast rescue boats and individual items of their equipment  Knowledge of the maintenance and emergency repairs of fast rescue boats and the normal inflation and deflation of buoyancy compartments of inflated fast rescue boats	Assessment of evidence obtained from practical instruction	The method of carrying out routine maintenance and emergency repairs  Identify components and required equipment for fast rescue boats  Ability to prepare and take
Take charge of the launching equipment and appliance as commonly fitted, during launching and recovery	Assessment of the readiness of launching equipment and launching appliance of fast rescue boats for immediate launching and operation  Understand the operation and limitations of the winch, brakes, falls, painters, motion-compensation and other equipment as commonly fitted  Safety precautions during launching and recovery of a fast rescue boat  Launching and recovery of a fast rescue boat in prevailing and adverse weather and sea conditions		charge of the launching equipment and appliance during launching and recovery of a fast rescue boat
Take charge of a fast rescue boat as commonly fitted, during launching and recovery	Assessment of the readiness of fast rescue boats and related equipment for immediate launching and operation  Safety precautions during launching and recovery of a fast rescue boat  Launching and recovery of a fast rescue boat in prevailing and adverse weather and sea conditions	Assessment of evidence obtained from practical demonstration of ability to conduct safe launching and recovery of a fast rescue boat, with equipment as fitted	Ability to take charge of a fast rescue boat during launching and recovery

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Take charge of a fast rescue boat after launching	Particular characteristics, facilities and limitations of fast rescue boats	Assessment of evidence obtained from practical demonstration of ability to:	Demonstration of operation of fast rescue boats within equipment limitations in prevailing weather conditions
	Procedures for the righting of a capsized fast rescue boat	.1 right a capsized fast rescue boat	
	How to handle a fast rescue boat in prevailing and adverse weather and sea conditions	.2 handle a fast rescue boat in prevailing weather and sea conditions	
	Navigational and safety equipment available in a fast rescue boat		
	Search patterns and environmental factors affecting their execution	.4 use communications and signalling equipment between the fast rescue boat and a helicopter and a ship	
		.5 use the emergency equipment carried	٠.٠
		.6 recover a casualty from the water and transfer a casualty to a rescue helicopter or to a ship or to a place of safety	
		.7 carry out search patterns, taking account of environmental factors	
Operate a fast rescue boat engine	Methods of starting and operating a fast rescue boat engine and its accessories	Assessment of evidence obtained from practical demonstration of ability to start and operate a fast rescue boat engine	Engine is started and operated as required for manoeuvring

Mandatory minimum training in advanced fire fighting

- Seafarers designated to control fire-fighting operations shall have successfully completed advanced training in techniques for fighting fire, with particular emphasis on organization, tactics and command, and shall be required to demonstrate competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-VI/3.
- The level of knowledge and understanding of the subjects listed in column 2 of table A-VI/3 shall be sufficient for the effective control of fire-fighting operations on board ship.
- 3 Training and experience to achieve the necessary level of theoretical knowledge, understanding and proficiency shall take account of the guidance given in part B of this Code.
- Every candidate for certification shall be required to provide evidence of having achieved the required standard of competence, in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-VI/3.
- Seafarers qualified in accordance with paragraph 4 in advanced fire fighting shall be required, every five years, to provide evidence of having maintained the required standards of competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-VI/3.
- Parties may accept onboard training and experience for maintaining the required standard of competence of table A-VI/3, in the following areas:
  - .1 Control fire-fighting operations aboard ships;
    - .1.1 fire-fighting procedures at sea and in port, with particular emphasis on organization, tactics and command;
    - .1.2 communication and coordination during fire-fighting operations;
    - .1.3 ventilation control, including smoke extraction;
    - .1.4 control of fuel and electrical systems;
    - .1.5 fire-fighting process hazards (dry distillation, chemical reactions, boiler uptake, fires);
    - .1.6 fire precautions and hazards associated with the storage and handling of materials;
    - .1.7 management and control of injured persons; and
    - .1.8 procedures for coordination with shore-based fire fighters.

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

 ${\it Table~A-VI/3}$  Specification of minimum standard of competence in advanced fire fighting

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Control fire-fighting operations aboard ships	Fire-fighting procedures at sea and in port, with particular emphasis on organization, tactics and command  Use of water for fire-extinguishing, the effect on ship stability, precautions and corrective procedures  Communication and coordination during fire-fighting operations  Ventilation control, including smoke extraction  Control of fuel and electrical systems  Fire-fighting process hazards (dry distillation, chemical reactions, boiler uptake fires, etc.)  Fire fighting involving dangerous goods  Fire precautions and hazards associated with the storage and handling of materials (paints, etc.)  Management and control of injured persons  Procedures for coordination with shore-based fire fighters	Practical exercises and instruction conducted under approved and truly realistic training conditions (e.g., simulated shipboard conditions) and, whenever possible and practicable, in darkness	Actions taken to control fires are based on a full and accurate assessment of the incident, using all available sources of information  The order of priority, timing and sequence of actions are appropriate to the overall requirements of the incident and to minimize damage and potential damage to the ship, injuries to personnel and impairment of the operational effectiveness of the ship  Transmission of information is prompt, accurate, complete and clear  Personal safety during fire control activities is safeguarded at all times
Organize and train fire parties	Preparation of contingency plans  Composition and allocation of personnel to fire parties	Practical exercises and instruction conducted under approved and truly realistic training conditions, e.g., simulated shipboard	Composition and organization of fire control parties ensure the prompt and effective implementation of
	Strategies and tactics for control of fires in various parts of the ship	conditions	emergency plans and procedures

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Inspect and service fire-detection and fire-extinguishing systems and equipment	Fire-detection systems; fixed fire-extinguishing systems; portable and mobile fire-extinguishing equipment, including appliances, pumps and rescue, salvage, life-support, personal protective and communication equipment  Requirements for statutory	Practical exercises, using approved equipment and systems in a realistic training environment	Operational effectiveness of all fire-detection and fire-extinguishing systems and equipment is maintained at all times in accordance with performance specifications and legislative requirements
Investigate and compile reports on incidents involving fire	and classification surveys  Assessment of cause of incidents involving fire	Practical exercises in a realistic training environment	Causes of fire are identified and the effectiveness of countermeasures is evaluated

Mandatory minimum requirements related to medical first aid and medical care.

## Standard of competence for seafarers designated to provide medical first aid on board ship

- Every seafarer who is designated to provide medical first aid on board ship shall be required to demonstrate the competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-VI/4-1.
- The level of knowledge of the subjects listed in column 2 of table A-VI/4-1 shall be sufficient to enable the designated seafarer to take immediate effective action in the case of accidents or illness likely to occur on board ship\*.
- 3 Every candidate for certification under the provisions of regulation VI/4, paragraph 1 shall be required to provide evidence that the required standard of competence has been achieved in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-VI/4-1.

## Standard of competence for seafarers designated to take charge of medical care on board ship

- Every seafarer who is designated to take charge of medical care on board ship shall be required to demonstrate the competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-VI/4-2.
- 5 The level of knowledge of the subjects listed in column 2 of table A-VI/4-2 shall be sufficient to enable the designated seafarer to take immediate effective action in the case of accidents or illness likely to occur on board ship.\*
- Every candidate for certification under the provisions of regulation VI/4, paragraph 2 shall be required to provide evidence that the required standard of competence has been achieved in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-VI/4-2.

The relevant IMO Model Course(s) may assist in the preparation of courses.

Table A-VI/4-1 Specification of minimum standard of competence in medical first aid

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Apply immediate first aid in the event of accident or illness on board	First-aid kit  Body structure and function  Toxicological hazards on board, including use of the Medical First Aid Guide for Use in Accidents Involving Dangerous Goods (MFAG) or its national equivalent  Examination of casualty or patient  Spinal injuries  Burns, scalds and effects of heat and cold  Fractures, dislocations and muscular injuries  Medical care of rescued persons  Radio medical advice  Pharmacology  Sterilization  Cardiac arrest, drowning and asphyxia	Assessment of evidence obtained from practical instruction	The identification of probable cause, nature and extent of injuries is prompt, complete and conforms to current first-aid practice  Risk of harm to self and to others is minimized at all times  Treatment of injuries and the patient's condition is appropriate and conforms to recognized first-aid practice and international guidelines

 ${\it Table~A-VI/4-2} \\ {\it Specification~of~minimum~standard~of~competence~in~medical~care} \\$ 

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Provide medical care to the sick and injured while they remain on board	Care of casualty involving:  I head and spinal injuries	Assessment of evidence obtained from practical instruction and demonstration	Identification of symptoms is based on the concepts of clinical examination and medical history
, 2	injuries  injuries of ear, nose, throat and eyes  external and internal bleeding  burns, scalds and frostbite  fractures, dislocations and muscular injuries  wounds, wound healing and infection  pain relief  techniques of sewing and clamping  management of acute abdominal conditions  minor surgical treatment  treatment  treatment  general principles  nursing care  Diseases, including:	,	1
	.1 medical conditions and emergencies .2 sexually transmitted diseases		
	.3 tropical and infectious diseases  Alcohol and drug abuse		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Provide medical care to the sick and	Dental care		
injured while they remain on board (continued)	Gynaecology, pregnancy and childbirth		
(00/11/11/10/05)	Medical care of rescued persons	•	·
	Death at sea		
	Hygiene		
	Disease prevention, including:		
	.1 disinfection, disinfestation, de-ratting		
	.2 vaccinations		
	Keeping records and copies of applicable regulations:		
	.1 keeping medical records		
	.2 international and national maritime medical regulations		
Participate in coordinated schemes for medical	External assistance, including:		Clinical examination procedures are complete and comply with instructions received
assistance to ships	.1 radio medical advice		The method and
	.2 transportation of the ill and injured, including helicopter evacuation		preparation for evacuation is in accordance with recognized procedures and
	.3 medical care of sick seafarers involving		is designed to maximize the welfare of the patient
	cooperation with port health authorities or out-patient wards in port		Procedures for seeking radio medical advice conform to established practice and
		-	recommendations

Mandatory minimum requirements for the issue of certificates of proficiency for ship security officers

- Every candidate for a certificate of proficiency as a ship security officer shall be required to demonstrate competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-VI/5.
- 2 The level of knowledge of the subjects listed in column 2 of table A-VI/5 shall be sufficient to enable the candidate to act as the designated ship security officer.
- 3 Training and experience to achieve the necessary level of theoretical knowledge, understanding and proficiency shall take- into account the guidance in section B-VI/5 of this Code.
- Every candidate for certification shall be required to provide evidence of having achieved the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-VI/5.

 ${\it Table~A-VI/5}$  Specifications of minimum standard of competence for ship security officers

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Maintain and supervise the implementation of a ship security plan	Knowledge of international maritime security policy and responsibilities of Governments, companies and designated persons, including elements that may relate to piracy and armed robbery  Knowledge of the purpose for and the elements that make up a ship security plan, related procedures and maintenance of records, including those that may relate to piracy and armed robbery  Knowledge of procedures to be employed in implementing a ship security plan and reporting of security incidents  Knowledge of maritime security incidents  Knowledge of maritime security measures and procedures aboard ship and in the port facility environment  Knowledge of the requirements and procedures for conducting internal audits, on-scene inspections, control and monitoring of security activities specified in a ship security plan  Knowledge of the requirements and procedures for reporting to the company security officer any deficiencies and non-conformities identified during internal audits, periodic reviews, and security inspections		Procedures and actions are in accordance with the principles established by the ISPS Code and the SOLAS, 1974, as amended  Legislative requirements relating to security are correctly identified  Procedures achieve a state of readiness to respond to changes in maritime security levels  Communications within the ship security officer's area of responsibility are clear and understood

Column 1	Column 2	Column 3	- Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Maintain and supervise the implementation of a ship security plan (continued)	Knowledge of the methods and procedures used to modify the ship security plan  Knowledge of security-related contingency plans and the procedures for responding to security threats or breaches of security, including provisions for maintaining critical operations of the ship/port interface, including also elements that may relate to piracy and armed robbery		
	Working knowledge of maritime security terms and definitions, including elements that may relate to piracy and anned robbery		
Assess security risk, threat, and vulnerability	Knowledge of risk assessment and assessment tools  Knowledge of security assessment documentation, including the Declaration of Security  Knowledge of techniques used to circumvent security measures, including those used by pirates and armed robbers  Knowledge enabling recognition, on a non-discriminatory basis, of persons posing potential security risks  Knowledge enabling recognition of weapons, dangerous substances and devices and awareness of the damage they can cause  Knowledge of crowd management and control techniques, where appropriate	inspections	Procedures and actions are in accordance with the principles established by the ISPS Code and the SOLAS, 1974, as amended  Procedures achieve a state of readiness to respond to changes in the maritime security levels  Communications within the ship security officer's area of responsibility are clear and understood

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Assess security risk, threat, and vulnerability (continued)	Knowledge in handling sensitive security-related information and security-related communications		
	Knowledge of implementing and co-ordinating searches		·
	Knowledge of the methods for physical searches and non-intrusive inspections		-
Undertake regular inspections of the ship to ensure that appropriate security measures are implemented and maintained	Knowledge of the requirements for designating and monitoring restricted areas  Knowledge of controlling access to the ship and to restricted areas on board ship  Knowledge of methods for effective monitoring of deck areas and areas surrounding the ship  Knowledge of security aspects relating to the handling of cargo and ship's stores with other shipboard personnel and relevant port facility security officers  Knowledge of methods for controlling the embarkation, disembarkation and access while on board of persons and their effects	Assessment of evidence obtained from approved training or examination	Procedures and actions are in accordance with the principles established by the ISPS Code and the SOLAS,1974, as amended  Procedures achieve a state of readiness to respond to changes in the maritime security levels  Communications within the ship security officer's area of responsibility are clear and understood
Ensure that security equipment and systems, if any, are properly operated, tested and calibrated	Knowledge of the various types of security equipment and systems and their limitations, including those that could be used in case of attacks by pirates and armed robbers	Assessment of evidence obtained from approved training or examination	Procedures and actions are in accordance with the principles established by the ISPS Code and the SOLAS, 1974, as amended
	Knowledge of the procedures, instructions and guidance on the use of ship security alert systems	-	

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
	Knowledge of the methods for testing, calibrating, and maintaining security systems and equipment, particularly whilst at sea		
Encourage security awareness and vigilance	Knowledge of training, drill and exercise requirements under relevant conventions, codes and IMO circulars, including those relevant to anti-piracy and anti-armed robbery  Knowledge of the methods for enhancing security awareness and vigilance on board  Knowledge of the methods for assessing the effectiveness of drills and exercises	Assessment of evidence obtained from approved training or examination	Procedures and actions are in accordance with the principles established by the ISPS Code and the SOLAS, 1974, as amended Communications within the ship security officer's area of responsibility are clear and understood

Mandatory minimum requirements for security-related training and instruction for all seafarers

## Standard of competence for security-related familiarization training

- Before being assigned to shipboard duties, all persons employed or engaged on a seagoing ship which is required to comply with the provisions of the ISPS Code, other than passengers, shall receive approved security-related familiarization training, taking account of the guidance given in part B, to be able to:
  - .1 report a security incident, including a piracy or armed robbery threat or attack;
  - .2 know the procedures to follow when they recognize a security threat; and
  - .3 take part in security-related emergency and contingency procedures.
- 2 Seafarers with designated security duties engaged or employed on a seagoing ship shall, before being assigned such duties, receive security-related familiarization training in their assigned duties and responsibilities, taking into account the guidance given in part B.
- 3 The security-related familiarization training shall be conducted by the ship security officer or an equally qualified person.

## Standard of competence for security-awareness training

- Seafarers employed or engaged in any capacity on board a ship which is required to comply with the provisions of the ISPS Code on the business of that ship as part of the ship's complement without designated security duties shall, before being assigned to any shipboard duties:
  - .1 receive appropriate approved training or instruction in security awareness as set out in table A-VI/6-1;
  - be required to provide evidence of having achieved the required standard of competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-VI/6-1:
    - .2.1 by demonstration of competence, in accordance with the methods and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-VI/6-1; and
    - by examination or continuous assessment as part of an approved training programme in the subjects listed in column 2 of table A-VI/6-1.

#### Transitional provisions

- Until 1 January 2014, seafarers who commenced an approved seagoing service prior to the date of entry into force of this section shall be able to establish that they meet the requirements of paragraph 4 by:
  - .1 approved seagoing service as shipboard personnel, for a period of at least six months in total during the preceding three years; or

- .2 having performed security functions considered to be equivalent to the seagoing service required in paragraph 5.1; or
- .3 passing an approved test; or
- .4 successfully completing approved training.

## Standard of competence for seafarers with designated security duties

- 6 Every seafarer who is designated to perform security duties, including anti-piracy and anti-armed-robbery-related activities, shall be required to demonstrate competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-VI/6-2.
- The level of knowledge of the subjects in column 2 of table A-VI/6-2 shall be sufficient to enable every candidate to perform on board designated security duties, including anti-piracy and anti-armed-robbery-related activities.
- 8 Every candidate for certification shall be required to provide evidence of having achieved the required standard of competence through:
  - demonstration of competence to undertake the tasks, duties and responsibilities listed in column I of table A-VI/6-2, in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of that table; and
  - .2 examination or continuous assessment as part of an approved training programme covering the material set out in column 2 of table A-VI/6-2.

#### Transitional provisions

- 9 Until 1 January 2014, seafarers with designated security duties who commenced an approved seagoing service prior to the date of entry into force of this section shall be able to demonstrate competence to undertake the tasks, duties and responsibilities listed in column 1 of table A-VI/6-2 by:
  - .1 approved seagoing service as shipboard personnel with designated security duties, for a period of at least six months in total during the preceding three years; or
  - .2 having performed security functions considered to be equivalent to the seagoing service required in paragraph 9.1; or
  - .3 passing an approved test; or
  - .4 successfully completing approved training.

Table A-VI/6-1
Specification of minimum standard of competence in security awareness

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Contribute to the enhancement of maritime security through heightened	Basic working knowledge of maritime security terms and definitions, including elements that may relate to piracy and armed robbery	Assessment of evidence obtained from approved instruction or during attendance at an approved course	Requirements relating to enhanced maritime security are correctly identified
awareness	Basic knowledge of international maritime security policy and responsibilities of Governments, companies and persons		- -
	Basic knowledge of maritime security levels and their impact on security measures and procedures aboard ship and in port facilities		
	Basic knowledge of security reporting procedures		-
	Basic knowledge of security-related contingency plans		
Recognition of security threats	Basic knowledge of techniques used to circumvent security measures  Basic knowledge enabling recognition of potential security threats, including elements that may relate to piracy and armed robbery	Assessment of evidence obtained from approved instruction or during attendance at an approved course	Maritime security threats are correctly identified
	Basic knowledge enabling recognition of weapons, dangerous substances and devices and awareness of the damage they can cause		
	Basic knowledge in handling security-related information and security-related communications	,	·

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Understanding of the need for and methods of maintaining security awareness and vigilance	Basic knowledge of training, drill and exercise requirements under relevant conventions, codes and IMO circulars, including those relevant for anti-piracy and anti-armed robbery	Assessment of evidence obtained from approved instruction or during attendance at an approved course	Requirements relating to enhanced maritime security are correctly identified

Table A-VI/6-2
Specifications of minimum standard of competence for seafarers with designated security duties

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Maintain the conditions set out in a ship security plan	Working knowledge of maritime security terms and definitions, including elements that may relate to piracy and armed robbery	Assessment of evidence obtained from approved instruction or during attendance at an approved course	Procedures and actions are in accordance with the principles established by the ISPS Code and the SOLAS, 1974, as amended
	Knowledge of international maritime security policy and responsibilities of Governments, companies and persons, including working knowledge of elements that may relate to piracy and armed robbery  Knowledge of maritime security levels and their impact on security measures and procedures aboard ship and in the port facilities		Legislative requirements relating to security are correctly identified  Communications within the area of responsibility are clear and understood
,	Knowledge of security reporting procedures		
	Knowledge of procedures and requirements for drills and exercises under relevant conventions, codes and IMO circulars, including working knowledge of those that may relate to piracy and armed robbery	-	
	Knowledge of the procedures for conducting inspections and surveys and for the control and monitoring of security activities specified in a ship security plan		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Maintain the conditions set forth in a ship security plan (continued)	Knowledge of security-related contingency plans and the procedures for responding to security threats or breaches of security, including provisions for maintaining critical operations of the ship/port interface, and including also working knowledge of those that may relate to piracy and armed robbery		
Recognition of security risks and threats	Knowledge of security documentation, including the Declaration of Security  Knowledge of techniques used to circumvent security measures, including those used by pirates and armed robbers	Assessment of evidence obtained from approved instruction or during attendance at an approved course	Procedures and actions are in accordance with the principles established by the ISPS Code and the SOLAS, 1974, as amended
	Knowledge enabling recognition of potential security threats  Knowledge enabling recognition of weapons, dangerous substances and devices and awareness of the damage they can cause		-
	Knowledge of crowd management and control techniques, where appropriate  Knowledge in handling security-related information and security-related communications		
-	Knowledge of the methods for physical searches and non-intrusive inspections		

Column 1	Column 2	Column 3	Column 4
Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Undertake regular security inspections of the ship	Knowledge of the techniques for monitoring restricted areas  Knowledge of controlling access to the ship and to restricted areas on board ship	Assessment of evidence obtained from approved instruction or during attendance at an approved course	Procedures and actions are in accordance with the principles established by the ISPS Code and the SOLAS Convention, as amended
	Knowledge of methods for effective monitoring of deck areas and areas surrounding the ship  Knowledge of inspection methods relating to the cargo and ship's stores		
	Knowledge of methods for controlling the embarkation, disembarkation and access while on board of persons and their effects		
Proper usage of security equipment and systems, if any	General knowledge of various types of security equipment and systems, including those that could be used in case of attacks by pirates and armed robbers, including their limitations	Assessment of evidence obtained from approved instruction or during attendance at an approved course	Equipment and systems operations are carried out in accordance with established equipment operating instructions and taking into account the limitations of the equipment and systems
	Knowledge of the need for testing, calibrating, and maintaining security systems and equipment, particularly whilst at sea		Procedures and actions are in accordance with the principles established by the ISPS Code and the SOLAS, 1974, as amended

## CHAPTER VII

## Standards regarding alternative certification

# Section A-VII/1

Issue of alternative certificates

- Every candidate for certification at the operational level under the provisions of chapter VII of the annex to the Convention shall be required to complete relevant education and training and meet the standard of competence for all the functions prescribed in either table A-III/I or table A-III/I. Functions specified in table A-III/I or A-III/I respectively may be added provided the candidate completes, as appropriate, additional relevant education and training and meets the standards of competence prescribed in those tables for the functions concerned.
- Every candidate for certification at the management level as the person having command of a ship of 500 gross tonnage or more, or the person upon whom the command of such a ship will fall in the event of the incapacity of the person in command, shall be required, in addition to compliance with the standard of competence specified in table A-II/1, to complete relevant education and training and meet the standard of competence for all of the functions prescribed in table A-II/2. Functions specified in the tables of chapter III of this part may be added provided the candidate completes, as appropriate, additional relevant education and training and meets the standards of competence prescribed in those tables for the functions concerned.
- Every candidate for certification at the management level as the person responsible for the mechanical propulsion of a ship powered by main propulsion machinery of 750 kW or more, or the person upon whom such responsibility will fall in the event of the incapacity of the person responsible for the mechanical propulsion of the ship, shall be required, in addition to compliance with the standard of competence specified in table A-III/1, to complete relevant education and training and meet the standard of competence for all of the functions prescribed in table A-III/2, as appropriate. Functions specified in the tables of chapter II of this part may be added provided the candidate completes, as appropriate, additional relevant education and training and meets the standards of competence prescribed in those tables for the functions concerned.
- 4 Every candidate for certification at the support level:
  - in navigation or marine engineering shall be required to complete relevant training and meet the standard of competence for the function prescribed in either table A-III/4 or table A-III/4. Functions specified in table A-III/4 or A-II/4 respectively may be added provided the candidate completes, as appropriate, additional relevant training and meets the standards of competence prescribed in those tables for the function concerned;
  - as able seafarer deck shall be required, in addition to compliance with the standard of competence specified in table A-II/4, to complete relevant training and meet the standard of competence for all of the functions prescribed in table A-II/5. Functions specified in table A-III/4 or A-III/5 may be added provided the candidate completes, as appropriate, additional relevant training and meets the standard of competence prescribed in that (those) table(s) for the function(s) concerned; and
  - .3 as able seafarer engine shall be required, in addition to compliance with the standard of competence specified in table A-III/4, to complete relevant training and meet

the standard of competence for all of the functions prescribed in table A-III/5. Functions specified in table A-III/4 or A-III/5 may be added provided the candidate completes, as appropriate, additional relevant training and meets the standards of competence prescribed in that (those) table(s) for the function(s) concerned.

### Section A-VII/2

- Certification of seafarers

- In accordance with the requirements of regulation VII/1, paragraph 1.3, every candidate for certification under the provisions of chapter VII at the operational level in functions specified in tables A-II/1 and A-III/1 shall:
  - have approved seagoing service of not less than 12 months, which service shall include a period of at least six months performing engine-room duties under the supervision of a qualified engineer officer and, where the function of navigation is required, a period of at least six months performing bridge watchkeeping duties under the supervision of a qualified bridge watchkeeping officer; and
  - have completed, during this service, onboard training programmes approved as meeting the relevant requirements of sections A-III/1 and A-III/1 and documented in an approved training record book.
- Every candidate for certification under the provisions of chapter VII at the management level in a combination of functions specified in tables A-II/2 and A-III/2 shall have approved seagoing service related to the functions to be shown in the endorsement to the certificate as follows:
  - for persons other than those having command or responsibility for the mechanical propulsion of a ship 12 months performing duties at the operational level related to regulation III/2 or III/3 as appropriate and, where the function of navigation at the management level is required, at least 12 months performing bridge watchkeeping duties at the operational level;
  - for those having command or the responsibility for the mechanical propulsion of a ship not less than 48 months, including the provisions in paragraph 2.1 of this section, performing, as a certificated officer, duties related to the functions to be shown in the endorsement to the certificate, of which 24 months shall be served performing functions set out in table A-III/1 and 24 months shall be served performing functions set out in tables A-III/1 and A-III/2.
- In accordance with the requirements of regulation VII/1, paragraph 1.3, every candidate for certification under the provisions of chapter VII at support level in functions specified in tables A-II/4 and A-III/4 shall have completed:
  - .1 approved seagoing service including not less than 12 months experience, made up of:
    - .1.1 not less than 6 months associated with navigational watchkeeping duties; and
    - .1.2 not less than 6 months associated with engine-room duties; or

- .2 special training, either pre-sea or on board ship, including an approved period of seagoing service which shall not be less than 4 months, made up of:
  - .2.1 not less than 2 months associated with navigational watchkeeping duties; and
  - .2.2 not less than 2 months associated with engine-room duties;
- the seagoing service, training and experience required by paragraph 3.1 or 3.2 shall be carried out under the direct supervision of an appropriately qualified officer or rating.
- In accordance with the requirements of regulation VII/1, paragraph 1.3, every candidate for certification under the provisions of chapter VII at the support level in functions specified in tables A-III/5 and A-III/5 shall, while qualified to serve as a rating forming part of a navigational and engine-room watch, meet the standards of competence specified in sections A-II/5 and A-III/5 of the STCW Code and have completed:
  - .1 approved seagoing service of not less than 30 months, made up of:
    - .1.1 not less than 18 months associated with able seafarer deck duties, and
    - .1.2 not less than 12 months associated with able seafarer engine duties; or
  - .2 an approved training programme and not less than 18 months of approved seagoing service, made up of:
    - .2.1 not less than 12 months associated with able seafarer deck duties; and
    - .2.2 not less than 6 months associated with able seafarer engine duties; or
  - .3 an approved special integrated deck and engine training programme, including not less than 12 months' approved seagoing service in an integrated deck and engine department, made up of:
    - .3.1 not less than 6 months associated with able seafarer deck duties; and
    - .3.2 not less than 6 months associated with able seafarer engine duties.

## Section A-VII/3

Principles governing the issue of alternative certificates

(No provisions)

## CHAPTER VIII

# Standards regarding watchkeeping

Section A-VIII/1
Fitness for duty

- 1 Administrations shall take account of the danger posed by fatigue of seafarers, especially those whose duties involve the safe and secure operation of a ship.
- All persons who are assigned duty as officer in charge of a watch or as a rating forming part of a watch and those whose duties involve designated safety, prevention of pollution and security duties shall be provided with a rest period of not less than:
  - . .1 a minimum of 10 hours of rest in any 24-hour period; and
    - .2 77 hours in any 7-day period.
- The hours of rest may be divided into no more than two periods, one of which shall be at least 6 hours in length, and the intervals between consecutive periods of rest shall not exceed 14 hours.
- The requirements for rest periods laid down in paragraphs 2 and 3 need not be maintained in the case of an emergency or in other overriding operational conditions. Musters, fire-fighting and lifeboat drills, and drills prescribed by national laws and regulations and by international instruments, shall be conducted in a manner that minimizes the disturbance of rest periods and does not induce fatigue.
- Administrations shall require that watch schedules be posted where they are easily accessible. The schedules shall be established in a standardized format in the working language or languages of the ship and in English.
- When a seafarer is on call, such as when a machinery space is unattended, the seafarer shall have an adequate compensatory rest period if the normal period of rest is disturbed by call-outs to work.
- Administrations shall require that records of daily hours of rest of seafarers be maintained in a standardized format, in the working language or languages of the ship and in English, to allow monitoring and verification of compliance with the provisions of this section. The seafarers shall receive a copy of the records pertaining to them, which shall be endorsed by the master or by a person authorized by the master and by the seafarers.
- Nothing in this section shall be deemed to impair the right of the master of a ship to require a seafarer to perform any hours of work necessary for the immediate safety of the ship, persons on board or cargo, or for the purpose of giving assistance to other ships or persons in distress at sea. Accordingly, the master may suspend the schedule of hours of rest and require a seafarer to perform any hours of work necessary until the normal situation has been restored. As soon as practicable after the normal situation has been restored, the master shall ensure that

<sup>\*</sup> The IMO/ILO Guidelines for the development of tables of seafarers' shipboard working arrangements and formats of records of seafarers' hours of work or hours of rest may be used.

any seafarers who have performed work in a scheduled rest period are provided with an adequate period of rest.

9 Parties may allow exceptions from the required hours of rest in paragraphs 2.2 and 3 above provided that the rest period is not less than 70 hours in any 7-day period.

Exceptions from the weekly rest period provided for in paragraph 2.2 shall not be allowed for more than two consecutive weeks. The intervals between two periods of exceptions on board shall not be less than twice the duration of the exception.

The hours of rest provided for in paragraph 2.1 may be divided into no more than three periods, one of which shall be at least 6 hours in length and neither of the other two periods shall be less than one hour in length. The intervals between consecutive periods of rest shall not exceed 14 hours. Exceptions shall not extend beyond two 24-hour periods in any 7-day period.

Exceptions shall, as far as possible, take into account the guidance regarding prevention of fatigue in section B-VIII/1.

Each Administration shall establish, for the purpose of preventing alcohol abuse, a limit of not greater than 0.05% blood alcohol level (BAC) or 0.25 mg/l alcohol in the breath or a quantity of alcohol leading to such alcohol concentration for masters, officers and other seafarers while performing designated safety, security and marine environmental duties.

## Section A-VIII/2

Watchkeeping arrangements and principles to be observed

#### PART 1 - CERTIFICATION

- The officer in charge of the navigational or deck watch shall be duly qualified in accordance with the provisions of chapter II or chapter VII appropriate to the duties related to navigational or deck watchkeeping.
- The officer in charge of the engineering watch shall be duly qualified in accordance with the provisions of chapter III or chapter VII appropriate to the duties related to engineering watchkeeping.

#### PART 2 – VOYAGE PLANNING

#### General requirements

- 3 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.
- 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.

## Planning prior to each voyage

Prior to each voyage, the master of every ship shall ensure that the intended route from the port of departure to the first port of call is planned using adequate and appropriate charts and other nautical publications necessary for the intended voyage, containing accurate, complete and up-to-date information regarding those navigational limitations and hazards which are of a permanent or predictable nature and which are relevant to the safe navigation of the ship.

# Verification and display of planned route

When the route planning is verified, taking into consideration all pertinent information, the planned route shall be clearly displayed on appropriate charts and shall be continuously available to the officer in charge of the watch, who shall verify each course to be followed prior to using it during the voyage.

## Deviation from planned route

If a decision is made, during a voyage, to change the next port of call of the planned route, or if it is necessary for the ship to deviate substantially from the planned route for other reasons, then an amended route shall be planned prior to deviating substantially from the route originally planned.

# PART 3 - WATCHKEEPING PRINCIPLES IN GENERAL

- 8 Watches shall be carried out based on the following bridge and engine-room resource management principles:
  - .1 proper arrangements for watchkeeping personnel shall be ensured in accordance with the situations;
  - any limitation in qualifications or fitness of individuals shall be taken into account
     when deploying watchkeeping personnel;
  - .3 understanding of watchkeeping personnel regarding their individual roles, responsibility and team roles shall be established;
  - the master, chief engineer officer and officer in charge of watch duties shall maintain a proper watch, making the most effective use of the resources available, such as information, installations/equipment and other personnel;
  - .5 watchkeeping personnel shall understand functions and operation of installations/equipment, and be familiar with handling them;
  - .6 watchkeeping personnel shall understand information and how to respond to information from each station/installation/equipment;
  - .7 information from the stations/installations/equipment shall be appropriately shared by all the watchkeeping personnel;
  - .8 watchkeeping personnel shall maintain an exchange of appropriate communication in any situation; and
  - .9 watchkeeping personnel shall notify the master/chief engineer officer/officer in charge of watch duties without any hesitation when in any doubt as to what action to take in the interest of safety.

### PART 4 - WATCHKEEPING AT SEA

## Principles applying to watchkeeping generally

- 9 Parties shall direct the attention of companies, masters, chief engineer officers and watchkeeping personnel to the following principles, which shall be observed to ensure that safe watches are maintained at all times.
- The master of every ship is bound to ensure that watchkeeping arrangements are adequate for maintaining a safe navigational or cargo watch. Under the master's general direction, the officers of the navigational watch are responsible for navigating the ship safely during their periods of duty, when they will be particularly concerned with avoiding collision and stranding.
- 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 engineering watch.

## Protection of marine environment

The master, officers and 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.

## Part 4-1 - Principles to be observed in keeping a navigational watch

13 The officer in charge of the navigational watch is the master's representative and is primarily responsible at all times for the safe navigation of the ship and for complying with the International Regulations for Preventing Collisions at Sea, 1972, as amended.

#### Lookout

- A proper lookout shall be maintained at all times in compliance with rule 5 of the International Regulations for Preventing Collisions at Sea, 1972, as amended and shall serve the purpose of:
  - .1 maintaining a continuous state of vigilance by sight and hearing, as well as by all other available means, with regard to any significant change in the operating environment;
  - .2 fully appraising the situation and the risk of collision, stranding and other dangers to navigation; and
  - .3 detecting ships or aircraft in distress, shipwrecked persons, wrecks, debris and other hazards to safe navigation.
- The lookout must be able to give full attention to the keeping of a proper lookout and no other duties shall be undertaken or assigned which could interfere with that task.
- The duties of the lookout and helmsperson are separate and the helmsperson shall not be considered to be the lookout 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 lookout. The officer in charge of the navigational watch may be the sole lookout in daylight provided that, on each such occasion:

- the situation has been carefully assessed and it has been established without doubt that it is safe to do so;
- full account has been taken of all relevant factors, including, but not limited to:
  - state of weather;
  - visibility;
  - traffic density;
  - proximity of dangers to navigation; and
  - the attention necessary when navigating in or near traffic separation schemes; and
- assistance is immediately available to be summoned to the bridge when any .3 change in the situation so requires.
- In determining that the composition of the navigational watch is adequate to ensure that a proper lookout can continuously be maintained, the master shall take into account all relevant factors, including those described in this section of the Code, as well as the following factors:
  - visibility, state of weather and sea; .1
  - traffic density, and other activities occurring in the area in which the vessel is .2 návigating;
  - the attention necessary when navigating in or near traffic separation schemes or .3 other routeing measures;
  - the additional workload caused by the nature of the ship's functions, immediate .4 operating requirements and anticipated manoeuvres;
  - the fitness for duty of any crew members on call who are assigned as members of .5 the watch;
  - knowledge of, and confidence in, the professional competence of the ship's .6 officers and crew;
  - the experience of each officer of the navigational watch, and the familiarity of that .7 officer with the ship's equipment, procedures, and manoeuvring capability;
  - activities taking place on board the ship at any particular time, including radiocommunication activities, and the availability of assistance to be summoned 8, immediately to the bridge when necessary;
  - the operational status of bridge instrumentation and controls, including alarm .9 systems;
  - rudder and propeller control and ship manoeuvring characteristics; .10
  - the size of the ship and the field of vision available from the conning position; ,11

- .12 the configuration of the bridge, to the extent such configuration might inhibit a member of the watch from detecting by sight or hearing any external development; and
- any other relevant standard, procedure or guidance relating to watchkeeping arrangements and fitness for duty which has been adopted by the Organization.

## Watch arrangements

- When deciding the composition of the watch on the bridge, which may include appropriately qualified ratings, the following factors, *inter alia*, shall be taken into account:
  - .1 at no time shall the bridge be left unattended;
  - .2 weather conditions, visibility and whether there is daylight or darkness;
  - .3 proximity of navigational hazards which may make it necessary for the officer in charge of the watch to carry out additional navigational duties:
  - .4 use and operational condition of navigational aids such as ECDIS, radar or electronic position-indicating devices and any other equipment affecting the safe navigation of the ship;
  - .5 whether the ship is fitted with automatic steering;
  - .6 whether there are radio duties to be performed;
  - .7 unmanned machinery space (UMS) controls, alarms and indicators provided on the bridge, procedures for their use and their limitations; and
  - .8 any unusual demands on the navigational watch that may arise as a result of special operational circumstances.

#### Taking over the watch

- 19 The officer in charge of the navigational watch shall not hand over the watch to the relieving officer if there is reason to believe that the latter is not capable of carrying out the watchkeeping duties effectively, in which case the master shall be notified.
- The relieving officer shall ensure that the members of the relieving watch are fully capable of performing their duties, particularly as regards their adjustment to night vision. Relieving officers shall not take over the watch until their vision is fully adjusted to the light conditions.
- 21 Prior to taking over the watch, relieving officers shall satisfy themselves as to the ship's estimated or true position and confirm its intended track, course and speed, and UMS controls as appropriate and shall note any dangers to navigation expected to be encountered during their watch.

- 22 Relieving officers shall personally satisfy themselves regarding the:
  - .1 standing orders and other special instructions of the master relating to navigation of the ship;
  - .2 position, course, speed and draught of the ship;
  - .3 prevailing and predicted tides, currents, weather, visibility and the effect of these factors upon course and speed;
  - .4 procedures for the use of main engines to manoeuvre when the main engines are on bridge control; and
  - .5 navigational situation, including, but not limited to:
    - .5.1 the operational condition of all navigational and safety equipment being used or likely to be used during the watch;
    - .5.2 the errors of gyro- and magnetic-compasses;
    - .5.3 the presence and movement of ships in sight or known to be in the vicinity;
    - .5.4 the conditions and hazards likely to be encountered during the watch; and
    - .5.5 the possible effects of heel, trim, water density and squat on under-keel clearance.
- If, at any time, the officer in charge of the navigational watch is to be relieved when a manoeuvre or other action to avoid any hazard is taking place, the relief of that officer shall be deferred until such action has been completed.

# Performing the navigational watch

- 24 The officer in charge of the navigational watch shall:
  - .1 keep the watch on the bridge;
  - .2 in no circumstances leave the bridge until properly relieved; and
  - .3 continue to be responsible for the safe navigation of the ship, despite the presence of the master on the bridge, until informed specifically that the master has assumed that responsibility and this is mutually understood.
- 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.
- The officer in charge of the navigational 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.

- 27 The officer in charge of the navigational watch shall not be assigned or undertake any duties which would interfere with the safe navigation of the ship.
- When using radar, the officer in charge of the navigational watch shall bear in mind the necessity to comply at all times with the provisions on the use of radar contained in the International Regulations for Preventing Collisions at Sea, 1972, as amended in force.
- In cases of need, the officer in charge of the navigational watch shall not hesitate to use the helm, engines and sound signalling apparatus. However, timely notice of intended variations of engine speed shall be given where possible or effective use shall be made of UMS engine controls provided on the bridge in accordance with the applicable procedures.
- 30 Officers of the navigational watch shall know the handling characteristics of their ship, including its stopping distances, and should appreciate that other ships may have different handling characteristics.
- 31 A proper record shall be kept during the watch of the movements and activities relating to the navigation of the ship.
- It is of special importance that at all times the officer in charge of the navigational watch ensures that a proper lookout is maintained. In a ship with a separate chartroom, the officer in charge of the navigational watch may visit the chartroom, when essential, for a short period for the necessary performance of navigational duties, but shall first ensure that it is safe to do so and that proper lookout is maintained.
- Operational tests of shipboard navigational equipment shall be carried out at sea as frequently as practicable and as circumstances permit, in particular before hazardous conditions affecting navigation are expected. Whenever appropriate, these tests shall be recorded. Such tests shall also be carried out prior to port arrival and departure.
- 34 The officer in charge of the navigational watch shall make regular checks to ensure that:
  - .1 the person steering the ship or the automatic pilot is steering the correct course;
  - .2 the standard compass error is determined at least once a watch and, when possible, after any major alteration of course; the standard and gyro-compasses are frequently compared and repeaters are synchronized with their master compass;
  - .3 the automatic pilot is tested manually at least once a watch;
  - .4 the navigation and signal lights and other navigational equipment are functioning properly;
  - .5 the radio equipment is functioning properly in accordance with paragraph 86 of this section; and
  - .6 the UMS controls, alarms and indicators are functioning properly.

- The officer in charge of the navigational watch shall bear in mind the necessity to comply at all times with the requirements in force of the International Convention for the Safety of Life at Sea (SOLAS), 1974. The officer of the navigational watch shall take into account:
  - .1 the need to station a person to steer the ship and to put the steering into manual control in good time to allow any potentially hazardous situation to be dealt with in a safe manner; and
  - .2 that, with a ship under automatic steering, it is highly dangerous to allow a situation to develop to the point where the officer in charge of the navigational watch is without assistance and has to break the continuity of the lookout in order to take emergency action.
- Officers of the navigational watch shall be thoroughly familiar with the use of all electronic navigational aids carried, including their capabilities and limitations, and shall use each of these aids when appropriate and shall bear in mind that the echo-sounder is a valuable navigational aid.
- 37 The officer in charge of the navigational watch shall use the radar whenever restricted visibility is encountered or expected, and at all times in congested waters, having due regard to its limitations.
- 38 The officer in charge of the navigational watch shall ensure that the range scales employed are changed at sufficiently frequent intervals so that echoes are detected as early as possible. It shall be borne in mind that small or poor echoes may escape detection.
- Whenever radar is in use, the officer in charge of the navigational watch shall select an appropriate range scale and observe the display carefully, and shall ensure that plotting or systematic analysis is commenced in ample time.
- The officer in charge of the navigational watch shall notify the master immediately:
  - .1 if restricted visibility is encountered or expected;
  - .2 if the traffic conditions or the movements of other ships are causing concern;
  - .3 if difficulty is experienced in maintaining course;
  - .4 on failure to sight land, or a navigation mark or to obtain soundings by the expected time;
  - .5 if, unexpectedly, land or a navigation mark is sighted or a change in soundings occurs;
  - .6 on breakdown of the engines, propulsion machinery remote control, steering gear or any essential navigational equipment, alarm or indicator;
  - .7 if the radio equipment malfunctions;

See SOLAS regulations V/24, V/25 and V/26.

- .8 in heavy weather, if in any doubt about the possibility of weather damage;
- .9 if the ship meets any hazard to navigation, such as ice or a derelict; and
- .10 in any other emergency or if in any doubt.
- Despite the requirement to notify the master immediately in the foregoing circumstances, the officer in charge of the navigational watch shall, in addition, not hesitate to take immediate action for the safety of the ship, where circumstances so require.
- The officer in charge of the navigational watch shall give watchkeeping personnel all appropriate instructions and information which will ensure the keeping of a safe watch, including a proper lookout.

## Watchkeeping under different conditions and in different areas

#### Clear weather

- The officer in charge of the navigational watch shall take frequent and accurate compass bearings of approaching ships as a means of early detection of risk of collision and shall bear in mind that such risk may sometimes exist even when an appreciable bearing change is evident, particularly when approaching a very large ship or a tow or when approaching a ship at close range. The officer in charge of the navigational watch shall also take early and positive action in compliance with the applicable International Regulations for Preventing Collisions at Sea, 1972, as amended and subsequently check that such action is having the desired effect.
- In clear weather, whenever possible, the officer in charge of the navigational watch shall carry out radar practice.

#### Restricted visibility

- When restricted visibility is encountered or expected, the first responsibility of the officer in charge of the navigational watch is to comply with the relevant rules of the International Regulations for Preventing Collisions at Sea, 1972, as amended with particular regard to the sounding of fog signals, proceeding at a safe speed and having the engines ready for immediate manoeuvre. In addition, the officer in charge of the navigational watch shall:
  - .1 inform the master;
  - .2 post a proper lookout;
  - .3 exhibit navigation lights; and
  - .4 operate and use the radar.

### In hours of darkness

The master and the officer in charge of the navigational watch, when arranging lookout duty, shall have due regard to the bridge equipment and navigational aids available for use, their limitations, procedures and safeguards implemented.

# Coastal and congested waters

- The largest scale chart on board, suitable for the area and corrected with the latest available information, shall be used. Fixes shall be taken at frequent intervals, and shall be carried out by more than one method whenever circumstances allow. When using ECDIS, appropriate usage code (scale) electronic navigational charts shall be used and the ship's position shall be checked by an independent means of position fixing at appropriate intervals.
- The officer in charge of the navigational watch shall positively identify all relevant navigation marks.

# Navigation with pilot on board

- Despite the duties and obligations of pilots, their presence on board does not relieve the master or the officer in charge of the navigational 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/or the officer in charge of the navigational watch shall co-operate closely with the pilot and maintain an accurate check on the ship's position and movement.
- If in any doubt as to the pilot's actions or intentions, the officer in charge of the navigational watch shall seek clarification from the pilot and, if doubt still exists, shall notify the master immediately and take whatever action is necessary before the master arrives.

## Ship at anchor

- If the master considers it necessary, a continuous navigational watch shall be maintained at anchor. While at anchor, the officer in charge of the navigational watch shall:
  - .1 determine and plot the ship's position on the appropriate chart as soon as practicable;
  - .2 when circumstances permit, check at sufficiently frequent intervals whether the ship is remaining securely at anchor by taking bearings of fixed navigation marks or readily identifiable shore objects;
  - .3 ensure that proper lookout is maintained;
  - .4 ensure that inspection rounds of the ship are made periodically;
  - .5 observe meteorological and tidal conditions and the state of the sea;
  - .6 notify the master and undertake all necessary measures if the ship drags anchor;
  - .7 ensure that the state of readiness of the main engines and other machinery is in accordance with the master's instructions;
  - .8 if visibility deteriorates, notify the master;
  - .9 ensure that the ship exhibits the appropriate lights and shapes and that appropriate sound signals are made in accordance with all applicable regulations; and

take measures to protect the environment from pollution by the ship and comply with applicable pollution regulations.

## Part 4-2 - Principles to be observed in keeping an engineering watch

- The term engineering watch as used in parts 4-2, 5-2 and 5-4 of this section means either a person or a group of personnel comprising the watch or a period of responsibility for an officer during which the physical presence in machinery spaces of that officer may or may not be required.
- The officer in charge of the engineering watch is the chief engineer officer's representative and is primarily responsible, at all times, for the safe and efficient operation and upkeep of machinery affecting the safety of the ship and is responsible for the inspection, operation and testing, as required, of all machinery and equipment under the responsibility of the engineering watch.

#### Watch arrangements

- The composition of the engineering 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.
- When deciding the composition of the engineering watch, which may include appropriately qualified ratings, the following criteria, inter alia, shall be taken into account:
  - .1 the type of ship and the type and condition of the machinery;
  - .2 the adequate supervision, at all times, of machinery affecting the safe operation of the ship;
  - .3 any special modes of operation dictated by conditions such as weather, ice, contaminated water, shallow water, emergency conditions, damage containment or pollution abatement;
  - .4 the qualifications and experience of the engineering watch;
  - .5 the safety of life, ship, cargo and port, and protection of the environment;
  - .6 the observance of international, national and local regulations; and
  - .7 maintaining the normal operations of the ship.

## Taking over the watch

- The officer in charge of the engineering watch shall not hand over the watch to the relieving officer if there is reason to believe that the latter is obviously not capable of carrying out the watchkeeping duties effectively, in which case the chief engineer officer shall be notified.
- 57 The relieving officer of the engineering watch shall ensure that the members of the relieving engineering watch are apparently fully capable of performing their duties effectively.

- Prior to taking over the engineering watch, relieving officers shall satisfy themselves regarding at least the following:
  - .1 the standing orders and special instructions of the chief engineer officer relating to the operation of the ship's systems and machinery;
  - the nature of all work being performed on machinery and systems, the personnel involved and potential hazards;
  - the level and, where applicable, the condition of water or residues in bilges, ballast tanks, slop tanks, reserve tanks, fresh water tanks, sewage tanks and any special requirements for use or disposal of the contents thereof;
  - .4 the condition and level of fuel in the reserve tanks, settling tank, day tank and other fuel storage facilities;
  - .5 any special requirements relating to sanitary system disposals;
  - condition and mode of operation of the various main and auxiliary systems, including the electrical power distribution system;
  - .7 where applicable, the condition of monitoring and control console equipment, and which equipment is being operated manually;
  - .8 where applicable, the condition and mode of operation of automatic boiler controls such as flame safeguard control systems, limit control systems, combustion control systems, fuel-supply control systems and other equipment related to the operation of steam boilers;
  - .9 any potentially adverse conditions resulting from bad weather, ice, or contaminated or shallow water;
  - .10 any special modes of operation dictated by equipment failure or adverse ship conditions;
  - .11 the reports of engine-room ratings relating to their assigned duties;
  - .12 the availability of fire-fighting appliances; and
  - .13 the state of completion of the engine-room log.

# Performing the engineering watch

- The officer in charge of the engineering watch shall ensure that the established watchkeeping arrangements are maintained and that, under direction, engine-room ratings, if forming part of the engineering watch, assist in the safe and efficient operation of the propulsion machinery and auxiliary equipment.
- The officer in charge of the engineering watch shall continue to be responsible for machinery-space operations, despite the presence of the chief engineer officer in the machinery spaces, until specifically informed that the chief engineer officer has assumed that responsibility and this is mutually understood.

- All members of the engineering watch shall be familiar with their assigned watchkeeping duties. In addition, every member shall, with respect to the ship they are serving in, have knowledge of:
  - .1 the use of appropriate internal communication systems;
  - .2 the escape routes from machinery spaces;
  - .3 the engine-room alarm systems and be able to distinguish between the various alarms, with special reference to the fire-extinguishing media alarm; and
  - .4 the number, location and types of fire-fighting equipment and damage-control gear in the machinery spaces, together with their use and the various safety precautions to be observed.
- 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.
- When the machinery spaces are in the manned condition, the officer in charge of the engineering 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 officer in charge of the engineering watch shall be immediately available and on call to attend the machinery spaces.
- All bridge orders shall be promptly executed. Changes in direction or speed of the main propulsion units shall be recorded, except where an Administration has determined that the size or characteristics of a particular ship make such recording impracticable. The officer in charge of the engineering watch shall ensure that the main propulsion unit controls, when in the manual mode of operation, are continuously attended under stand-by or manoeuvring conditions.
- Due attention shall be paid to the ongoing maintenance and support of all machinery, including mechanical, electrical, electronic, 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.
- The chief engineer officer shall ensure that the officer in charge of the engineering watch is informed of all preventive maintenance, damage control, or repair operations to be performed during the engineering watch. The officer in charge of the engineering watch shall be responsible for the isolation, bypassing and adjustment of all machinery under the responsibility of the engineering watch that is to be worked on, and shall record all work carried out.
- When the engine-room is put in a stand-by condition, the officer in charge of the engineering 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.
- Officers in charge of an engineering watch shall not be assigned or undertake any duties which would interfere with their supervisory duties in respect of the main propulsion system and

ancillary equipment. They shall keep the main propulsion plant and auxiliary systems under constant supervision until properly relieved, and shall periodically inspect the machinery in their charge. They shall also ensure that adequate rounds of the machinery and steering-gear spaces are made for the purpose of observing and reporting equipment malfunctions or breakdowns, performing or directing routine adjustments, required upkeep and any other necessary tasks.

- 70. Officers in charge of an engineering watch shall direct any other member of the engineering watch to inform them of potentially hazardous conditions which may adversely affect the machinery or jeopardize the safety of life or of the ship.
- The officer in charge of the engineering watch shall ensure that the machinery space watch is supervised, and shall arrange for substitute personnel in the event of the incapacity of any engineering watch personnel. The engineering watch shall not leave the machinery spaces unsupervised in a manner that would prevent the manual operation of the engine-room plant or throttles.
- 72 The officer in charge of the engineering watch shall take the action necessary to contain the effects of damage resulting from equipment breakdown, fire, flooding, rupture, collision, stranding, or other cause.
- Before going off duty, the officer in charge of the engineering watch shall ensure that all events related to the main and auxiliary machinery which have occurred during the engineering watch are suitably recorded.
- 74 The officer in charge of the engineering watch shall cooperate with any engineer in charge of maintenance work during all preventive maintenance, damage control or repairs. This shall include, but not necessarily be limited to:
  - .1 isolating and bypassing machinery to be worked on;
  - .2 adjusting the remaining plant to function adequately and safely during the maintenance period;
  - recording, in the engine-room log or other suitable document, the equipment worked on and the personnel involved, and which safety steps have been taken and by whom, for the benefit of relieving officers and for record purposes; and
  - .4 testing and putting into service, when necessary, the repaired machinery or equipment.
- 75 The officer in charge of the engineering watch shall ensure that any engine-room ratings who perform maintenance duties are available to assist in the manual operation of machinery in the event of automatic equipment failure.
- The officer in charge of the engineering watch shall bear in mind that changes in speed, resulting from machinery malfunction, or any loss of steering may imperil the safety of the ship and life at sea. The bridge shall be immediately notified in the event of fire and of any impending action in machinery spaces that may cause reduction in the 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 action is possible to avoid a potential marine casualty.

- 77 The officer in charge of the engineering watch shall notify the chief engineer officer without delay:
  - .1 when engine damage or a malfunction occurs which may be such as to endanger the safe operation of the ship;
  - .2 when any malfunction occurs which, it is believed, may cause damage or breakdown of propulsion machinery, auxiliary machinery or monitoring and governing systems; and
  - .3 in any emergency or if in any doubt as to what decision or measures to take.
- 78 Despite the requirement to notify the chief engineer officer in the foregoing circumstances, the officer in charge of the engineering watch shall not hesitate to take immediate action for the safety of the ship, its machinery and crew where circumstances require.
- The officer in charge of the engineering watch shall give the watchkeeping personnel all appropriate instructions and information which will ensure the keeping of a safe engineering watch. Routine machinery upkeep, performed as incidental tasks as a part of keeping a safe watch, shall be set up as an integral part of the watch routine. Detailed repair maintenance involving repairs to electrical, mechanical, hydraulic, pneumatic or applicable electronic equipment throughout the ship shall be performed with the cognizance of the officer in charge of the engineering watch and chief engineer officer. These repairs shall be recorded.

# Engineering watchkeeping under different conditions and in different areas

#### Restricted visibility

The officer in charge of the engineering watch shall ensure that permanent air or steam pressure is available for sound signals and that at all times bridge orders relating to changes in speed or direction of operation are immediately implemented and, in addition, that auxiliary machinery used for manoeuvring is readily available.

## Coastal and congested waters

The officer in charge of the engineering watch shall ensure that all machinery involved with the manoeuvring of the ship can immediately be placed in the manual mode of operation when notified that the ship is in congested waters. The officer in charge of the engineering watch shall also ensure that an adequate reserve of power is available for steering and other manoeuvring requirements. Emergency steering and other auxiliary equipment shall be ready for immediate operation.

## Ship at anchor

At an unsheltered anchorage the chief engineer officer shall consult with the master whether or not to maintain the same engineering watch as when under way.

- When a ship is at anchor in an open roadstead or any other virtually "at-sea" condition, the engineer officer in charge of the engineering watch shall ensure that:
  - .1 an efficient engineering watch is kept;
  - .2 periodic inspection is made of all operating and stand-by machinery;
  - .3 main and auxiliary machinery is maintained in a state of readiness in accordance with orders from the bridge;
  - .4 measures are taken to protect the environment from pollution by the ship, and that applicable pollution-prevention regulations are complied with; and
  - .5 all damage-control and fire-fighting systems are in readiness.

## Part 4-3 - Principles to be observed in keeping a radio watch

## General provisions

Administrations shall direct the attention of companies, masters and radio watchkeeping personnel to comply with the following provisions to ensure that an adequate safety radio watch is maintained while a ship is at sea. In complying with this Code, account shall be taken of the Radio Regulations.

## Watch arrangements

- 85 In deciding the arrangements for the radio watch, the master of every seagoing ship shall:
  - .1 ensure that the radio watch is maintained in accordance with the relevant provisions of the Radio Regulations and the SOLAS Convention;
  - .2 ensure that the primary duties for radio watchkeeping are not adversely affected by attending to radio traffic not relevant to the safe movement of the ship and safety of navigation; and
  - .3 take into account the radio equipment fitted on board and its operational status.

# Performing the radio watch

- The radio operator performing radio watchkeeping duties shall:
  - .1 ensure that watch is maintained on the frequencies specified in the Radio Regulations and the SOLAS Convention; and
  - .2 while on duty, regularly check the operation of the radio equipment and its sources of energy and report to the master any observed failure of this equipment.
- 87 The requirements of the Radio Regulations and the SOLAS Convention on keeping a radiotelegraph or radio log, as appropriate, shall be complied with.
- The maintenance of radio records, in compliance with the requirements of the Radio Regulations and the SOLAS Convention, is the responsibility of the radio operator designated as

having primary responsibility for radiocommunications during distress incidents. The following shall be recorded, together with the times at which they occur:

- .1 a summary of distress, urgency and safety radiocommunications;
- .2 important incidents relating to the radio service;
- 3 where appropriate, the position of the ship at least once per day; and
- a summary of the condition of the radio equipment, including its sources of energy.
- The radio records shall be kept at the distress communications operating position, and shall be made available:
  - .1 for inspection by the master; and
  - .2 for inspection by any authorized official of the Administration and by any duly authorized officer exercising control under article X of the Convention.

## PART 5 - WATCHKEEPING IN PORT

## Principles applying to all watchkeeping

#### General

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. Special requirements may be necessary for special types of ships' propulsion systems or ancillary equipment and for ships carrying hazardous, dangerous, toxic or highly flammable materials or other special types of cargo.

#### Watch arrangements

- Arrangements for keeping a deck watch when the ship is in port shall at all times be adequate to:
  - .1 ensure the safety of life, of the ship, the port and the environment, and the safe operation of all machinery related to cargo operation;
  - .2 observe international, national and local rules; and
  - .3 maintain order and the normal routine of the ship.
- The master shall decide the composition and duration of the deck watch depending on the conditions of mooring, type of the ship and character of duties.
- 93 If the master considers it necessary, a qualified officer shall be in charge of the deck watch.
- The necessary equipment shall be so arranged as to provide for efficient watchkeeping.

- The chief engineer officer, in consultation with the master, shall ensure that engineering watchkeeping arrangements are adequate to maintain a safe engineering watch while in port. When deciding the composition of the engineering watch, which may include appropriate engine-room ratings, the following points are among those to be taken into account:
  - on all ships of 3,000 kW propulsion power and over there shall always be an officer in charge of the engineering watch;
  - .2 on ships of less than 3,000 kW propulsion power there may be, at the master's discretion and in consultation with the chief engineer officer, no officer in charge of the engineering watch; and
  - officers, while in charge of an engineering watch, shall not be assigned or undertake any task or duty which would interfere with their supervisory duty in respect of the ship's machinery system.

## Taking over the watch

- Officers in charge of the deck or engineering watch shall not hand over the watch to their relieving officer if they have any reason to believe that the latter is obviously not capable of carrying out watchkeeping duties effectively, in which case the master or chief engineer shall be notified accordingly. Relieving officers of the deck or engineering watch shall ensure that all members of their watch are apparently fully capable of performing their duties effectively.
- If, at the moment of handing over the deck or engineering watch, an important operation is being performed, it shall be concluded by the officer being relieved, except when ordered otherwise by the master or chief engineer officer.

# Part 5-1 - Taking over the deck watch

- Prior to taking over the deck watch, the relieving officer shall be informed by the officer in charge of the deck watch as to the following:
  - the depth of the water at the berth, the ship's draught, the level and time of high and low waters; the securing of the moorings, the arrangement of anchors and the scope of the anchor chain, and other mooring features important to the safety of the ship; the state of main engines and their availability for emergency use;
  - .2 all work to be performed on board the ship; the nature, amount and disposition of cargo loaded or remaining, and any residue on board after unloading the ship;
  - .3 the level of water in bilges and ballast tanks;
  - .4 the signals or lights being exhibited or sounded;
  - .5 the number of crew members required to be on board and the presence of any other persons on board;
  - .6 the state of fire-fighting appliances;
  - .7 any special port regulations;

- .8 the master's standing and special orders;
- .9 the lines of communication available between the ship and shore personnel, including port authorities, in the event of an emergency arising or assistance being required;
- any other circumstances of importance to the safety of the ship, its crew, cargo or protection of the environment from pollution; and
- the procedures for notifying the appropriate authority of any environmental pollution resulting from ship activities.
- 99 Relieving officers, before assuming charge of the deck watch, shall verify that:
  - .1 the securing of moorings and anchor chain is adequate;
  - .2 the appropriate signals or lights are properly exhibited or sounded;
  - .3 safety measures and fire-protection regulations are being maintained;
  - .4 they are aware of the nature of any hazardous or dangerous cargo being loaded or discharged and the appropriate action to be taken in the event of any spillage or fire; and
  - .5 no external conditions or circumstances imperil the ship and that it does not imperil others.

## Part 5-2 - Taking over the engineering watch

100 Prior to taking over the engineering watch, the relieving officer shall be informed by the officer in charge of the engineering watch as to:

- .1 the standing orders of the day, any special orders relating to the ship operations, maintenance functions, repairs to the ship's machinery or control equipment;
- .2 the nature of all work being performed on machinery and systems on board ship, personnel involved and potential hazards;
- .3 the level and condition, where applicable, of water or residue in bilges, ballast tanks, slop tanks, sewage tanks, reserve tanks and special requirements for the use or disposal of the contents thereof;
- .4 any special requirements relating to sanitary system disposals;
- .5 the condition and state of readiness of portable fire-extinguishing equipment and fixed fire-extinguishing installations and fire-detection systems;
- .6 authorized repair personnel on board engaged in engineering activities, their work locations and repair functions and other authorized persons on board and the required crew;

- .7 any port regulations pertaining to ship effluents, fire-fighting requirements and ship readiness, particularly during potential bad weather conditions;
- .8 the lines of communication available between the ship and shore personnel, including port authorities, in the event of an emergency arising or assistance being required;
- .9 any other circumstance of importance to the safety of the ship, its crew, cargo or the protection of the environment from pollution; and
- .10 the procedures for notifying the appropriate authority of environmental pollution resulting from engineering activities.
- 101 Relieving officers, before assuming charge of the engineering watch, shall satisfy themselves that they are fully informed by the officer being relieved, as outlined above; and:
  - .1 be familiar with existing and potential sources of power, heat and lighting and their distribution;
  - .2 know the availability and condition of ship's fuel, lubricants and all water supplies; and
  - be ready to prepare the ship and its machinery, as far as is possible, for stand-by or emergency conditions as required.

# Part 5-3 – Performing the deck watch

- 102 The officer in charge of the deck watch shall:
  - .1 make rounds to inspect the ship at appropriate intervals;
  - .2 pay particular attention to:
    - .2.1 the condition and securing of the gangway, anchor chain and moorings, especially at the turn of the tide and in berths with a large rise and fall, if necessary, taking measures to ensure that they are in normal working condition;
    - .2.2 the draught, under-keel clearance and the general state of the ship, to avoid dangerous listing or trim during cargo handling or ballasting;
    - .2.3 the weather and sea state;
    - .2.4 the observance of all regulations concerning safety and fire protection;
    - .2.5 the water level in bilges and tanks;
    - .2.6 all persons on board and their location, especially those in remote or enclosed spaces; and
    - .2.7 the exhibition and sounding, where appropriate, of lights and signals;

- in bad weather, or on receiving a storm warning, take the necessary measures to protect the ship, persons on board and cargo;
- .4 take every precaution to prevent pollution of the environment by the ship;
- in an emergency threatening the safety of the ship, raise the alarm, inform the master, take all possible measures to prevent any damage to the ship, its cargo and persons on board, and, if necessary, request assistance from the shore authorities or neighbouring ships;
- .6 be aware of the ship's stability condition so that, in the event of fire, the shore fire-fighting authority may be advised of the approximate quantity of water that can be pumped on board without endangering the ship;
- .7 offer assistance to ships or persons in distress;
- .8 take necessary precautions to prevent accidents or damage when propellers are to be turned; and
- .9 enter, in the appropriate log-book, all important events affecting the ship.

## Part 5-4 - Performing the engineering watch

- Officers in charge of the engineering watch shall pay particular attention to:
  - the observance of all orders, special operating procedures and regulations concerning hazardous conditions and their prevention in all areas in their charge;
  - .2 the instrumentation and control systems, monitoring of all power supplies, components and systems in operation;
  - .3 the techniques, methods and procedures necessary to prevent violation of the pollution regulations of the local authorities; and
  - .4 the state of the bilges.
- 104 Officers in charge of the engineering watch shall:
  - in emergencies, raise the alarm when, in their opinion, the situation so demands, and take all possible measures to prevent damage to the ship, persons on board and cargo;
  - .2 be aware of the deck officer's needs relating to the equipment required in the loading or unloading of the cargo and the additional requirements of the ballast and other ship stability control systems;
  - .3 make frequent rounds of inspection to determine possible equipment malfunction or failure, and take immediate remedial action to ensure the safety of the ship, of cargo operations, of the port and the environment;

- .4 ensure that the necessary precautions are taken, within their area of responsibility, to prevent accidents or damage to the various electrical, electronic, hydraulic, pneumatic and mechanical systems of the ship; and
- ensure that all important events affecting the operation, adjustment or repair of the ship's machinery are satisfactorily recorded.

# Part 5-5 - Watch in port on ships carrying hazardous cargo

#### General

- The master of every ship carrying cargo that is hazardous, whether explosive, flammable, toxic, health-threatening or environment-polluting, shall ensure that safe watchkeeping arrangements are maintained. On ships carrying hazardous cargo in bulk, this will be achieved by the ready availability on board of a duly qualified officer or officers, and ratings where appropriate, even when the ship is safely moored or safely at anchor in port.
- On ships carrying hazardous cargo other than in bulk, the master shall take full account of the nature, quantity, packing and stowage of the hazardous cargo and of any special conditions on board, afloat and ashore.

## Part 5-6 - Cargo watch

107 Officers with responsibility for the planning and conduct of cargo operations shall ensure that such operations are conducted safely through the control of the specific risks, including when non-ship's personnel are involved."

2 The part B of the Seafarers' Training, Certification and Watchkeeping (STCW) Code is replaced by the following:

## "PART B

# Recommended guidance regarding provisions of the STCW Convention and its annex

#### Introduction

- This part of the STCW Code contains recommended guidance intended to assist Parties to the STCW Convention and those involved in implementing, applying or enforcing its measures to give the Convention full and complete effect in a uniform manner.
- The measures suggested are not mandatory and the examples given are only intended to illustrate how certain Convention requirements may be complied with. However, the recommendations in general represent an approach to the matters concerned which has been harmonized through discussion within IMO involving, where appropriate, consultation with the International Labour Organization, the International Telecommunication Union and the World Health Organization.
- 3 Observance of the recommendations contained in this part will assist the Organization in achieving its goal of maintaining the highest practicable standards of competence in respect of crews of all nationalities and ships of all flags.
- Guidance is provided in this part in respect of certain articles of the Convention, in addition to guidance on certain regulations in its annex. The numbering of the sections of this part therefore corresponds with that of the articles and the regulations of the Convention. As in part A, the text of each section may be divided into numbered parts and paragraphs, but such numbering is unique to that text alone.

# GUIDANCE REGARDING PROVISIONS OF THE ARTICLES

#### Section B-I

Guidance regarding general obligations under the Convention

(No provisions)

## Section B-II

Guidance regarding definitions and clarifications

- The definitions contained in article II of the Convention, and the definitions and clarifications contained in regulation I/1 of its annex, apply equally to the terms used in parts A and B of this Code. Supplementary definitions which apply only to the provisions of this Code are contained in section A-I/1.
- The definition of certificate appearing in article II (c) provides for three possibilities:
  - .1 . the Administration may issue the certificate;
  - .2 the Administration may have the certificate issued under its authority; or
  - .3 the Administration may recognize a certificate issued by another Party, as provided for in regulation I/10.

## Section B-III

Guidance regarding the application of the Convention

- While the definition of *fishing vessel* contained in article II, paragraph (h) excludes vessels used for catching fish, whales, seals, walrus or other living resources of the sea from application of the Convention, vessels not engaged in the catching activity cannot enjoy such exclusion.
- 2 The Convention excludes all wooden ships of primitive build, including junks.

## Section B-IV

Guidance regarding the communication of information

- In paragraph (1)(b) of article IV, the words "where appropriate" are intended to include:
  - .1 the recognition of a certificate issued by another Party; or
  - .2 the issue of the Administration's own certificate, where applicable, on the basis of recognition of a certificate issued by another Party.

## Section B-V

Guidance regarding other treaties and interpretation

The word "arrangements" in paragraph (1) of article V is intended to include provisions previously established between States for the reciprocal recognition of certificates.

#### Section B-VI

Guidance regarding certificates

See the guidance given in sections B-I/2 and B-II.

A policy statement and an outline of the procedures to be followed should be published for the information of companies operating ships under the flag of the Administration.

#### Section B-VII

Guidance regarding transitional provisions

Certificates issued for service in one capacity which are currently recognized by a Party as an adequate qualification for service in another capacity, e.g., chief mate certificates recognized for service as master, should continue to be accepted as valid for such service under article VII. This acceptance also applies to such certificates issued under the provisions of paragraph (2) of article VII.

#### Section B-VIII

Guidance regarding dispensations

A policy statement and an outline of the procedures to be followed should be published for the information of companies operating ships under the flag of the Administration. Guidance should be provided to those officials authorized by the Administration to issue dispensations. Information on action taken should be summarized in the initial report communicated to the Secretary-General in accordance with the requirements of section A-I/7.

#### Section B-IX

Guidance regarding equivalents

Naval certificates may continue to be accepted and certificates of service may continue to be issued to naval officers as equivalents under article IX, provided that the requirements of the Convention are met.

#### Section B-X

Guidance regarding control

(No provisions - see section B-I/4.)

#### Section B-XI

Guidance regarding the promotion of technical co-operation

- Governments should provide, or arrange to provide, in collaboration with IMO, assistance to States which have difficulty in meeting the requirements of the Convention and which request such assistance.
- The importance of adequate training for masters and other personnel serving on board oil, chemical and liquefied gas tankers and ro-ro passenger ships is stressed, and it is recognized that in some cases there may be limited facilities for obtaining the required experience and providing specialized training programmes, particularly in developing countries.

#### Examination database

Parties with maritime training academies or examination centres serving several countries and wishing to establish a database of examination questions and answers are encouraged to do so, on the basis of bilateral co-operation with a country or countries which already have such a database.

# Availability of maritime training simulators

- 4 The IMO Secretariat maintains a list of maritime training simulators, as a source of information for Parties and others on the availability of different types of simulators for training seafarers, in particular where such training facilities may not be available to them nationally.
- Parties are urged to provide information on their national maritime training simulators to the IMO Secretariat and to update the information whenever any change or addition is made to their maritime training simulator facilities.

# Information on technical co-operation

Information on technical advisory services, access to international training institutions affiliated with IMO, and information on fellowships and other technical co-operation which may be provided by or through IMO may be obtained by contacting the Secretary-General at 4 Albert Embankment, London SEI 7SR, United Kingdom.

(No guidance is provided regarding articles XII to XVII.)

See MSC.1/Circ.1209 on simulators available for maritime training.

# GUIDANCE REGARDING PROVISIONS OF THE ANNEX TO THE STCW CONVENTION

#### CHAPTER I

## Guidance regarding general provisions

#### Section B-I/1

Guidance regarding definitions and clarifications

- The definitions contained in article II of the Convention, and the definitions and interpretations contained in regulation I/1 of its annex, apply equally to the terms used in parts A and B of this Code. Supplementary definitions which apply only to the provisions of this Code are contained in section A-I/1.
- Officers with capacities covered under the provisions of chapter VII may be designated as "polyvalent officer", "dual-purpose officer" or other designations as approved by the Administration, in accordance with the terminology used in the applicable safe manning requirements.
- Ratings qualified to serve in capacities covered under the provisions of chapter VII may be designated as "polyvalent ratings" or other designations as approved by the Administration, in accordance with the terminology used in the applicable safe manning requirements.

#### Section B-I/2

Guidance regarding certificates and endorsements

- Where an endorsement is integrated in the format of a certificate as provided by section A-1/2, paragraph 1, the relevant information should be inserted in the certificate in the manner explained hereunder, except for the omission of the space numbered .2. Otherwise, in preparing endorsements attesting the issue of a certificate, the spaces numbered .1 to .17 in the form which follows the text hereunder should be completed as follows:
  - .1 Enter the name of the issuing State.
  - .2 Enter the number assigned to the certificate by the Administration.
  - .3 Enter the full name of the seafarer to whom the certificate is issued. The name should be the same as that appearing in the seafarer's passport, seafarer's identity certificate and other official documents issued by the Administration.
  - .4 The number or numbers of the STCW Convention regulation or regulations under which the seafarer has been found qualified should be entered here, for example:
    - .4.1 "Regulation II/1", if the seafarer has been found qualified to fill the capacity of officer in charge of a navigational watch;
    - .4.2 "Regulation III/1", if the seafarer has been found qualified to act as engineer officer in charge of a watch in a manned engine-room, or as designated duty engineer officer in a periodically unmanned engine-room;

- .4.3 "Regulation IV/2", if the seafarer has been found qualified to fill the capacity of radio operator;
- "Regulation VII/I", if the certificate is a functional certificate and the seafarer has been found qualified to perform functions specified in part A of the Code, for example, the function of marine engineering at the management level; and
- .4.5 "Regulations III/1 and V/1", if found qualified to act as the engineer officer in charge of a watch in a manned engine-room, or as designated duty engineer officer in a periodically unmanned engine-room in tankers. (See limitations in paragraphs .8 and .10 below.)
- .5 Enter the date of expiry of the endorsement. This date should not be later than the date of expiry, if any, of the certificate in respect of which the endorsement is issued, nor later than five years after the date of issue of the endorsement.
- In this column should be entered each of the functions specified in part A of the Code which the seafarer is qualified to perform. Functions and their associated levels of responsibility are specified in the tables of competence set out in chapters II, III and IV of part A of the Code, and are also listed for convenient reference in the introduction to part A. When reference is made under .4 above to regulations in chapter II, III or IV it is not necessary to list specific functions.
- .7. In this column should be entered the levels of responsibility at which the seafarer is qualified to perform each of the functions entered in column .6. These levels are specified in the tables of competence set out in chapters II, III and IV of part A of the Code, and are also listed, for convenient reference, in the introduction to part A.
- A general limitation, such as the requirement to wear corrective lenses when performing duties, should be entered prominently at the top of this limitations column. Limitations applying to the functions listed in column .6 should be entered on the appropriate line against the function concerned, for example:
  - .8.1 "Not valid for service in tankers" if not qualified under chapter V;
  - .8.2 "Not valid for service in tankers other than oil tankers" if qualified under chapter V for service only in oil tankers;
    - .8.3 "Not valid for service in ships in which steam boilers form part of the ship's machinery" if the related knowledge has been omitted in accordance with STCW Code provisions; and
    - .8.4 "Valid only on near-coastal voyages" if the related knowledge has been omitted in accordance with STCW Code provisions.

Note: Tonnage and power limitations need not be shown here if they are already indicated in the title of the certificate and in the capacity entered in column .9.

- .9 The capacity or capacities entered in this column should be those specified in the title to the STCW regulation or regulations concerned in the case of certificates issued under chapter II or III, or should be as specified in the applicable safe manning requirements of the Administration, as appropriate.
- A general limitation, such as the requirement to wear corrective lenses when performing duties, should be entered prominently at the top of this limitations column also. The limitations entered in column .10 should be the same as those shown in column .8 for the functions performed in each capacity entered.
- .11 The number entered in this space should be that of the certificate, so that both certificate and endorsement have the same unique number for reference and for location in the register of certificates and/or endorsements, etc.
- .12 The date of original issue of the endorsement should be entered here; it may be the same as, or differ from, the date of issue of the certificate, in accordance with the circumstances.
- .13 The name of the official authorized to issue the endorsement should be shown here in block letters below the official's signature.
- .14 The date of birth shown should be the date confirmed from Administration records or as otherwise verified.
- .15 The endorsement should be signed by the seafarer in the presence of an official, or may be incorporated from the seafarer's application form duly completed and verified.
- The photograph should be a standard black and white or colour passport-type head and shoulders photograph, supplied in duplicate by the seafarer so that one may be kept in or associated with the register of certificates.
- .17 If the blocks for revalidation are shown as part of the endorsement form (see section A-I/2, paragraph 1), the Administration may revalidate the endorsement by completing the block after the seafarer has demonstrated continuing proficiency as required by regulation I/11.

### (COUNTRY)

# ENDORSEMENT ATTESTING THE ISSUE OF A CERTIFICATE UNDER THE PROVISIONS OF THE INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS, 1978, AS AMENDED

The Government of	ucho has he	en found auto augunta ut	accordance with the	
provisions of regulation	ollowing functions or until the	at the levels specified, subje	ect to any limitations	
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.9 CAPACITY		.10 LIMITATIONS APP	LYINĠ (IF ANY)	
			-	
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(Official Seal)		Signature of duly authorized official		
		Name of duly auth	13orized official	
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Date of birth of the holder of the co	ertificate			
Signature of the holder of the certif			•	
Photograph of the holder of the cer	THICATE		.16	
			1	

The validity of this endorsement is hereby extended until				
(Official Seal)	Signature of duly authorized official			
Date of revalidation17	Name of duly authorized official			
The validity of this endorsement is hereby extended until				
(Official Seal)	Signature of the authorized official			
Date of revalidation	Name of duly authorized official			

- An endorsement attesting the recognition of a certificate may be attached to and form part of the certificate endorsed, or may be issued as a separate document (see STCW regulation I/2, paragraph 8). All entries made in the form are required to be in Roman characters and Arabic figures (see STCW regulation I/2, paragraph 10). The spaces numbered .1 to .17 in the form which follows the text hereunder are intended to be completed as indicated in paragraph 1 above, except in respect of the following spaces:
  - where the number assigned by the Party which issued the certificate being recognized should be entered;
  - .3 where the name entered should be the same as that appearing in the certificate being recognized;
  - .4 where the name of the Party which issued the certificate being recognized should be entered;
  - .9 where the capacity or capacities entered should be selected, as appropriate, from those specified in the safe applicable manning requirements of the Administration which is recognizing the certificate;
  - .11 where the number entered should be unique to the endorsement both for reference and for location in the register of endorsements; and
  - .12 where the date of original issue of the endorsement should be entered.

# (COUNTRY)

# ENDORSEMENT ATTESTING THE RECOGNITION OF A CERTIFICATE UNDER THE PROVISIONS OF THE INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS, 1978, AS AMENDED

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	Signature of duly authorized official
	Name of duly authorized official
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ertificate	
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rtificate	
	.16
	nust be kept availa serving on a ship.

The validity of this endorsement is hereby extended until				
(Official Seal)	Signature of duly authorized official			
Date of revalidation	Name of duly authorized official			
The validity of this endorsement is hereby extended until				
(Official Seal)	Signature of the authorized official			
Date of revalidation	Name of duly authorized official			

- When replacing a certificate or endorsement which has been lost or destroyed, Parties should issue the replacement under a new number, to avoid confusion with the document to be replaced.
- If an application for revalidation is made within six months before the expiry of an endorsement, the endorsement referred to in paragraphs 5, 6 and 7 of regulation I/2 may be revalidated until:
  - .1 the fifth anniversary of the date of validity, or extension of the validity, of the endorsement; or
  - .2 the date the certificate endorsed expires, whichever is earlier.
- Where a Certificate of Proficiency is issued, it should contain at least the following information:
  - .1 names of the issuing Party and authority;
  - .2 number assigned to the certificate by the issuing authority;
  - .3 full name and date of birth of the seafarer to whom the certificate is issued.

    The name and birthdate should be the same as that appearing in the seafarer's passport or seafarer's identification document;
  - .4 title of the certificate. For example, if the certificate is issued in relation to regulation VI/3, paragraph 2, the title used should be "advanced fire fighting" and if it is issued in relation to regulation VI/5, paragraph 1, the title used should be "ship security officer";

- .5 number, or numbers, of the Convention regulation(s) or of the STCW Code section under which the seafarer has been found qualified;
- dates of issue and expiry of the certificate. If the validity of the certificate is unlimited, then, for the benefit of clarification, the "unlimited" term should be entered in front of the date of expiry;
- .7 if applicable, limitations, either general limitation (such as the requirement to wear corrective lenses), ship's type limitation (such as "valid only for service on ships of GT<500") or, voyage limitation (such as "valid only on near-coastal voyages");
- .8 name and signature of the authorized person who issues the certificate;
- .9 photograph of the seafarer. The photograph should be a standard black and white or colour passport-type head and shoulders photograph;
- .10 if the certificate is intended to be revalidated, then the date of revalidation, extension of the validity, name and signature of the authorized person; and
- .11 the contact details of the issuing Authority.

#### Table B-I/2

# List of certificates or documentary evidence required under the STCW Convention

The list below identifies all certificates or documentary evidence described in the Convention which authorize the holder to serve in certain functions on board ships. The certificates are subject to the requirements of regulation I/2 regarding language and their availability in original form.

The list also references the relevant regulations and the requirements for endorsement, registration and revalidation.

Regulations	Type of certificate and brief description	Endorsement attesting recognition of a certificate <sup>1</sup>	Registration required <sup>2</sup>	Revalidation of certificate <sup>3</sup>
II/1, II/2, II/3, III/1, III/2, III/3, III/6, IV/2, VII/2	Certificate of Competency — For masters, officers and GMDSS radio operators	Yes	Yes	Yes
II/4, III/4, VII/2	Certificate of Proficiency - For ratings duly certified to be a part of a navigational or engine-room watch	No	Yes	No
II/5, III/5, III/7, VII/2	Certificate of Proficiency — For ratings duly certified as able seafarer deck, able seafarer engine or electro-technical rating	No	Yes	No
V/1-1, V/1-2	Certificate of Proficiency or endorsement to a Certificate of Competency – For masters and officers on oil, chemical or liquefied gas tankers	Yes	Yes	Yes
V/1-1, V/1-2	Certificate of Proficiency – For ratings on oil, chemical or liquefied gas tankers	No	Yes	No
V/2	Documentary evidence - Training for masters, officers, ratings and other personnel serving on passenger ships	No	. No	No⁴ ·
VI/1	Certificate of Proficiency <sup>5</sup> – Basic training	No	Yes	Yes⁵
VI/2	Certificate of Proficiency <sup>5</sup> – Survival craft, rescue boats and fast rescue boats	No	Yes	Yes <sup>6</sup>
VI/3	Certificate of Proficiency <sup>5</sup> – Advanced fire fighting	No	Yes	Yes <sup>6</sup>
VI/4	Certificate of Proficiency <sup>5</sup> – Medical first aid and medical care	No	Yes	No
VI/5	Certificate of Proficiency – Ship security officer	No	Yes	No
VI/6	Certificate of Proficiency - Security awareness training or security training for seafarers with designated security duties	No	Yes	No

#### Notes:

- Endorsement attesting recognition of a certificate means endorsement in accordance with regulation I/2, paragraph 7.
- 2 Registration required means as part of register or registers in accordance with regulation I/2, paragraph 14.
- Revalidation of a certificate means establishing continued professional competence in accordance with regulation I/11 or maintaining the required standards of competence in accordance with sections A-VI/1 to A-VI/3, as applicable.
- As required by regulation V/2, paragraph 3 seafarers who have completed training in "crowd management", "crisis management and human behaviour" or "passenger safety, cargo safety and hull integrity" shall at intervals not exceeding five years, undertake appropriate refresher training or to provide evidence of having achieved the required standards of competence within the previous five years.
- The certificates of competency issued in accordance with regulations II/1, II/2, II/3, III/1, III/2, III/3, III/6 and VII/2 include the proficiency requirements in "basic training", "survival craft and rescue boats other than fast rescue boats", "advanced fire fighting" and "medical first aid" therefore, holders of mentioned certificates of competency are not required to carry Certificates of Proficiency in respect of those competences of chapter VI.
- In accordance with sections A-VI/1, A-VI/2 and A-VI/3, seafarers shall provide evidence of having maintained the required standards of competence every five years.
- Where security awareness training or training in designated security duties is not included in the qualification for the certificate to be issued.

#### Section B-I/3

Guidance regarding near-coastal voyages

Coastal States may adopt regional "near-coastal voyage limits" through bilateral or multilateral arrangements. Details of such arrangements shall be reported to the Secretary-General, who shall circulate such particulars to all Parties.

#### Section B-I/4

Guidance regarding control procedures\*

#### Introduction

- The purpose of the control procedures of regulation I/4 is to enable officers duly authorized by port States to ensure that the seafarers on board have sufficient competence to ensure safe, secure and pollution-free operation of the ship.
- This provision is no different in principle from the need to make checks on ships' structures and equipment. Indeed, it builds on these inspections to make an appraisal of the total system of onboard safety, security and pollution prevention.

#### Assessment

- 3 By restricting assessment as indicated in section A-I/4, the subjectivity which is an unavoidable element in all control procedures is reduced to a minimum, no more than would be evident in other types of control inspection.
- The clear grounds given in regulation I/4, paragraph 1.3 will usually be sufficient to direct the inspector's attention to specific areas of competency, which could then be followed up by seeking evidence of training in the skills in question. If this evidence is inadequate or unconvincing, the authorized officer may ask to observe a demonstration of the relevant skill.
- It will be a matter for the professional judgement of the inspector when on board, either following an incident\*\* as outlined in regulation I/4 or for the purposes of a routine inspection, whether the ship is operated in a manner likely to pose a danger to persons, property or the environment\*.

#### Section B-I/5

Guidance regarding national provisions

(No provisions)

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

<sup>\*\*</sup> See the Code of International Standards and Recommended Practices for a Safety Investigation into a marine casualty or marine incident (Casualty Investigation Code)

#### Section B-I/6

Guidance regarding training and assessment

#### Qualifications of instructors and assessors

Each Party should ensure that instructors and assessors are appropriately qualified and experienced for the particular types and levels of training or assessment of competence of seafarers, as required under the Convention, in accordance with the guidelines in this section.

### In-service training and assessment

- Any person, on board or ashore, conducting in-service training of a seafarer intended to be used in qualifying for certification under the Convention should have received appropriate guidance in instructional techniques.
- Any person responsible for the supervision of in-service training of a seafarer intended to be used in qualifying for certification under the Convention should have appropriate knowledge of instructional techniques and of training methods and practice.
- 4 · Any person, on board or ashore, conducting an in-service assessment of the competence of a seafarer intended to be used in qualifying for certification under the Convention should have:
  - .1 received appropriate guidance in assessment methods and practice\*; and
  - .2 gained practical assessment experience under the supervision and to the satisfaction of an experienced assessor.
- Any person responsible for the supervision of the in-service assessment of competence of a seafarer intended to be used in qualifying for certification under the Convention should have a full understanding of the assessment system, assessment methods and practice.

# Use of distance learning and e-learning

6 Parties may allow the training of seafarers by distance learning and e-learning in accordance with the standards of training and assessment set out in section A-I/6 and the guidance given below.

# Guidance for training by distance learning and e-learning

- 7 Each Party should ensure that any distance learning and e-learning programme:
  - .1 is provided by an entity that is approved by the Party;
  - .2 is suitable for the selected objectives and training tasks to meet the competence level for the subject covered;
  - .3 has clear and unambiguous instructions for the trainees to understand how the programme operates;
  - .4 provides learning outcomes that meet all the requirements to provide the underpinning knowledge and proficiency of the subject;

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

- is structured in a way that enables the trainee to systematically reflect on what has been learnt through both self assessment and tutor-marked assignments; and
- .6 provides professional tutorial support through telephone, facsimile or e-mail communications.
- 8 Companies should ensure that a safe learning environment is provided and that there has been sufficient time provided to enable the trainee to study.
- Where e-learning is provided, common information formats such as XML (Extensible Markup Language), which is a flexible way to share both the format and the data on the World Wide Web, intranets, and elsewhere, should be used.
- 10 The e-learning system should be secured from tampering and attempts to hack into the system.

# Guidance for assessing a trainee's progress and achievements by training by distance learning and e-learning

- 11 Each Party should ensure that approved assessment procedures are provided for any distance learning and e-learning programme, including:
  - .1 clear information to the trainees on the way that tests and examinations are conducted and how the results are communicated;
  - have test questions that are comprehensive and will adequately assess a trainee's competence and are appropriate to the level being examined;
  - .3. procedures in place to ensure questions are kept up to date;
  - .4 the conditions where the examinations can take place and the procedures for invigilation to be conducted;
  - .5 secure procedures for the examination system so that it will prevent cheating; and
  - .6 secure validation procedures to record results for the benefit of the Party.

# Register of approved training providers, courses and programmes

Each Party should ensure that a register or registers of approved training providers, courses and programmes are maintained and made available to companies and other Parties on request.

#### Section B-L/7

Guidance regarding communication of information

#### Reports of difficulties encountered

Parties are encouraged, when communicating information in accordance with article IV and regulation I/7 of the Convention, to include an index specifically locating the required information as follows:

# Index of materials submitted in accordance with article IV and regulation I/7 of the STCW Convention

	·	
Article	IV of the STCW Convention	Location
1	Text of laws, decrees, orders, regulations and instruments (article IV(1)(a))	
2	Details on study courses (article IV(1)(b))	
3	National examination and other requirements (article IV(1)(b))	
4	Specimen certificates (article IV(1)(c))	
Section	n A-I/7 part 1 of the STCW Code	Location
5 .	Information on Governmental organization (section A-I/7, paragraph 2.1)	
6	Explanation of legal and administrative measures (section A-I/7, paragraph 2.2)	
7	Statement of the education, training, examination, assessment and certification policies (section A-I/7, paragraph 2.3)	
8	Summary of the courses, training programmes, examinations and assessments by certificate (section A-I/7, paragraph 2.4)	-
9 .	Outline of the procedures and conditions for authorizations, accreditations and approvals (section A-I/7, paragraph 2.5)	
. 10	List of authorizations, accreditations and approvals granted (section A-I/7, paragraph 2.5)	
11	Summary of procedures for dispensations (section A-I/7, paragraph 2.6)	•
12	Comparison carried out pursuant to regulation I/11 (section A-I/7, paragraph 2.7)	
13	Outline of refresher and upgrading training mandated (section A-I/7, paragraph 2.7)	

#### Section A-I/7, part 2, paragraph 3 of the STCW Code

#### Location

- Description of equivalency arrangements adopted pursuant to article IX (section A-I/7, paragraph 3.1)
- Summary of measures taken to ensure compliance with regulation I/10 (section A-I/7, paragraph 3.2)
- Specimen copy of safe manning documents issued to ships employing seafarers holding alternative certificates under regulation VII/1 (section A-I/7, paragraph 3.3)

#### Section A-I/7, part 2, paragraph 4 of the STCW Code

Location

- 17 Report of results of independent evaluations carried out pursuant to regulation I/8 covering:
  - .1 Terms of reference of evaluators for the independent evaluation
  - .2 Qualifications and experience of evaluators
  - .3 Date and scope of evaluation
  - .4 Non-conformities found
  - .5 Corrective measures recommended
  - .6 Corrective measures carried out
  - .7 List of training institutions/centres covered by the independent evaluation

#### Section A-I/7, part 2, paragraph 6 of the STCW Code

Location

- Explanation of legal and administrative measures (section A-I/7, paragraph 6.1)
- Statement of the education, training, examination, assessment and certification policies (section A-I/7, paragraph 6.2)
- Summary of the courses, training programmes, examinations and assessments by certificate (section A-I/7, paragraph 6.3)
- Outline of refresher and upgrading training mandated (section A-I/7, paragraph 6.4)
- Comparison carried out pursuant to regulation I/11 (section A-I/7, paragraph 6.5)

2 Parties are requested to include, in the reports required by regulation I/7, an indication of any relevant guidance contained in part B of this Code, the observance of which has been found to be impracticable.

#### Section B-I/8

Guidance regarding quality standards

- In applying quality standards under the provisions of regulation I/8 and section A-I/8 to the administration of its certification system, each Party should take account of existing national or international models, and incorporate the following key elements:
  - .1 an expressed policy regarding quality and the means by which such policy is to be implemented;
  - .2 a quality system incorporating the organizational structure, responsibilities, procedures, processes and resources necessary for quality management;
  - .3 the operational techniques and activities to ensure quality control;
  - .4 systematic monitoring arrangements, including internal quality-assurance evaluations, to ensure that all defined objectives are being achieved; and
  - .5 arrangements for periodic external quality evaluations as described in the following paragraphs.
- 2 In establishing such quality standards for the administration of their national certification system, Administrations should seek to ensure that the arrangements adopted:
  - are sufficiently flexible to enable the certification system to take account of the varying needs of the industry, and that they facilitate and encourage the application of new technology;
  - cover all the administrative matters that give effect to the various provisions of the Convention, in particular regulations I/2 to I/15 and other provisions which enable the Administration to grant certificates of service and dispensations and to withdraw, cancel and suspend certificates;
  - .3 encompass the Administration's responsibilities for approving training and assessment at all levels, from undergraduate-type courses and updating courses for certificates of competency to short courses of vocational training; and
  - incorporate arrangements for the internal quality-assurance reviews under paragraph 1.4 involving a comprehensive self-study of the administrative procedures, at all levels, in order to measure achievement of defined objectives and to provide the basis for the independent external evaluation required under section A-I/8, paragraph 3.

#### Quality standards model for assessment of knowledge, understanding, skills and competence

- 3 The quality standards model for assessment of knowledge, understanding, skills and competence should incorporate the recommendations of this section within the general framework of either:
  - .1 a national scheme for education and training accreditation or quality standards; or
  - .2 an alternative quality-standards model acceptable to the Organization.
- 4 The above quality-standards model should incorporate:
  - a quality policy, including a commitment by the training institution or unit to the achievement of its stated aims and objectives and to the consequential recognition by the relevant accrediting or quality-standards authority;
  - .2 those quality-management functions that determine and implement the quality policy, relating to aspects of the work which impinge on the quality of what is provided, including provisions for determining progression within a course or programme;
  - .3 quality system coverage, where appropriate, of the academic and administrative organizational structure, responsibilities, procedures, processes and the resources of staff and equipment;
  - .4 the quality-control functions to be applied at all levels to the teaching, training, examination and assessment activities, and to their organization and implementation, in order to ensure their fitness for their purpose and the achievement of their defined objectives;
  - .5 the internal quality-assurance processes and reviews which monitor the extent to which the institution, or training unit, is achieving the objectives of the programmes it delivers, and is effectively monitoring the quality-control procedures which it employs; and
  - the arrangements made for periodic external quality evaluations required under regulation I/8, paragraph 2 and described in the following paragraphs, for which the outcome of the quality-assurance reviews forms the basis and starting point.
- In establishing quality standards for education, training and assessment programmes, the organizations responsible for implementing these programmes should take account of the following:
  - .1 Where provisions exist for established national accreditation, or education quality standards, such provisions should be utilized for courses incorporating the knowledge and understanding requirements of the Convention. The quality standards should be applied to both management and operational levels of the activity, and should take account of how it is managed, organized, undertaken and evaluated, in order to ensure that the identified goals are achieved.
  - .2 Where acquisition of a particular skill or accomplishment of a designated task is the primary objective, the quality standards should take account of whether real or simulated equipment is utilized for this purpose, and of the appropriateness of the qualifications and experience of the assessors, in order to ensure achievement of the set standards.

The internal quality-assurance evaluations should involve a comprehensive self-study of the programme, at all levels, to monitor achievement of defined objectives through the application of quality standards. These quality-assurance reviews should address the planning, design, presentation and evaluation of programmes as well as the teaching, learning and communication activities. The outcome provides the basis for the independent evaluation required under section A-I/8, paragraph 3.

#### The independent evaluation

- Each independent evaluation should include a systematic and independent examination of all quality activities, but should not evaluate the validity of the defined objectives. The evaluation team should:
  - .1 carry out the evaluation in accordance with documented procedures;
  - .2 ensure that the results of each evaluation are documented and brought to the attention of those responsible for the area evaluated; and
  - .3 check that timely action is taken to correct any deficiencies.
- The purpose of the evaluation is to provide an independent assessment of the effectiveness of the quality-standard arrangements at all levels. In the case of an education or training establishment, a recognized academic accreditation or quality-standards body or Government agency should be used. The evaluation team should be provided with sufficient advance information to give an overview of the tasks in hand. In the case of a major training institution or programme, the following items are indicative of the information to be provided:
  - ,1 the mission statement of the institution;
  - .2 details of academic and training strategies in use;
  - .3 an organization chart and information on the composition of committees and advisory bodies;
  - .4 staff and student information;
  - .5 a description of training facilities and equipment; and
  - .6 an outline of the policies and procedures on:
    - .6.1 student admission;
    - .6.2 the development of new courses and review of existing courses;
    - .6.3 the examination system, including appeals and resits;
    - .6.4 staff recruitment, training, development, appraisal and promotion;
      - .6.5 feedback from students and from industry; and
      - .6.6 staff involvement in research and development.

#### The report

- 8 Before submitting a final report, the evaluation team should forward an interim report to the management, seeking their comments on their findings. Upon receiving their comments, the evaluators should submit their final report, which should:
  - .1 include brief background information about the institution or training programme;
  - .2 be full, fair and accurate;
  - .3 highlight the strengths and weaknesses of the institution;
  - .4 describe the evaluation procedure followed;
  - .5 cover the various elements identified in paragraph 4;
  - .6 indicate the extent of compliance or non-compliance with the requirements of the Convention and the effectiveness of the quality standards in ensuring achievement of defined aims and objectives; and
  - .7 spell out clearly the areas found to be deficient, offer suggestions for improvement and provide any other comments the evaluators consider relevant.

#### Section B-I/9

Guidance regarding medical standards

#### MEDICAL EXAMINATION AND CERTIFICATION

- Parties, in establishing seafarer medical fitness standards and provisions, should take into account the minimum physical abilities set out in table B-I/9 and the guidance given within this section, bearing in mind the different duties of seafarers.
- Parties, in establishing seafarer medical fitness standards and provisions, should follow the guidance contained in the ILO/WHO publication Guidelines for Conducting Pre-sea and Periodic Medical Fitness Examinations for Seafarers, including any subsequent versions, and any other applicable international guidelines published by the International Labour Organization, the International Maritime Organization or the World Health Organization.
- Appropriate qualifications and experience for medical practitioners conducting medical fitness examinations of seafarers may include occupational health or maritime health qualifications, experience of working as a ship's doctor or a shipping company doctor or working under the supervision of someone with the aforementioned qualifications or experience.
- 4 The premises where medical fitness examinations are carried out should have the facilities and equipment required to carry out medical fitness examination of seafarers.
- 5 Administrations should ensure that recognized medical practitioners enjoy full professional independence in exercising their medical judgement when undertaking medical examination procedures.
- Persons applying for a medical certificate should present to the recognized medical practitioner appropriate identity documentation to establish their identity. They should also surrender their previous medical certificate.

- Each Administration has the discretionary authority to grant a variance or waiver of any of the standards set out in table B-I/9 hereunder, based on an assessment of a medical evaluation and any other relevant information concerning an individual's adjustment to the condition and proven ability to satisfactorily perform assigned shipboard functions.
- The medical fitness standards should, so far as possible, define objective criteria with regard to fitness for sea service, taking into account access to medical facilities and medical expertise on board ship. They should, in particular, specify the conditions under which seafarers suffering from potentially life-threatening medical conditions that are controlled by medication may be allowed to continue to serve at sea.
- The medical standards should also identify particular medical conditions, such as colour blindness, which might preclude seafarers holding particular positions on board ship.
- 10 The minimum in-service eyesight standards in each eye for unaided distance vision should be at least 0.1\*.
- Persons requiring the use of spectacles or contact lenses to perform duties should have a spare pair or pairs, as required, conveniently available on board the ship. Any need to wear visual aids to meet the required standards should be recorded on the medical fitness certificate issued.
- Colour vision testing should be in accordance with the *International Recommendation for Colour Vision Requirements for Transport*, published by the Commission Internationale de l'Eclairage (CIE 143-2001 including any subsequent versions) or equivalent test methods.

Value given in Snellen decimal notation.

 ${\it Table~B-I/9}$  Assessment of minimum entry level and in-service physical abilities for seafarers  $^3$ 

Shipboard task, function, event	Related physical ability	A medical examiner should be satisfied that the candidate4
or condition <sup>3</sup> Routine movement around vessel: - on moving deck - between levels - between compartments	Maintain balance and move with agility Climb up and down vertical ladders and stairways Step over coamings (e.g., Load Line Convention requires coamings to be 600 mm high) Open and close watertight doors	Has no disturbance in sense of balance Does not have any impairment or disease that prevents relevant movements and physical activities  Is, without assistance <sup>5</sup> , able to: - climb vertical ladders and stairways - step over high sills - manipulate door closing systems
Routine tasks on board:  - Use of hand tools  - Movement of ship's stores  - Overhead work  - Valve operation  - Standing a four-hour watch  - Working in confined spaces  - Responding to alarms,  warnings and instructions  - Verbal communication	Strength, dexterity and stamina to manipulate mechanical devices Lift, pull and carry a load (e.g., 18 kg)  Reach upwards Stand, walk and remain alert for an extended period  Work in constricted spaces and move through restricted openings (e.g., SOLAS requires minimum openings in cargo spaces and emergency escapes to have the minimum dimensions of 600 mm × 600 mm — SOLAS regulation 3.6.5.1)  Visually distinguish objects, shapes and signals Hear warnings and instructions Give a clear spoken description	Does not have a defined impairment or diagnosed medical condition that reduces ability to perform routine duties essential to the safe operation of the vessel  Has ability to: - work with arms raised - stand and walk for an extended period - enter confined space - fulfil eyesight standards (table A-I/9) - fulfil hearing standards set by competent authority or take account of international guidelines - hold normal conversation
Note 1 applies to this row	dosorption	

Shipboard task, function, event or condition <sup>3</sup>	Related physical ability	A medical examiner should be satisfied that the candidate <sup>4</sup>
Emergency duties on board:  - Escape  - Fire-fighting  - Evacuation	Don a lifejacket or immersion suit Escape from smoke-filled spaces	Does not have a defined impairment or diagnosed medical condition that reduces ability to perform emergency duties essential to the safe operation of the vessel
	Take part in fire-fighting duties, including use of breathing apparatus Take part in vessel evacuation procedures	Has ability to: - don lifejacket or immersion suit - crawl - feel for differences in temperature - handle fire-fighting equipment - wear breathing apparatus (where required as part of duties)
Note 2 applies to this row		

#### Notes:

- Rows 1 and 2 of the above table describe (a) ordinary shipboard tasks, functions, events and conditions, (b) the corresponding physical abilities which may be considered necessary for the safety of a seafarer, other crew members and the ship, and (c) high-level criteria for use by medical practitioners assessing medical fitness, bearing in mind the different duties of seafarers and the nature of shipboard work for which they will be employed.
- Row 3 of the above table describes (a) ordinary shipboard tasks, functions, events and conditions, (b) the corresponding physical abilities which should be considered necessary for the safety of a seafarer, other crew members and the ship, and (c) high-level criteria for use by medical practitioners assessing medical fitness, bearing in mind the different duties of seafarers and the nature of shipboard work for which they will be employed.
- This table is not intended to address all possible shipboard conditions or potentially disqualifying medical conditions. Parties should specify physical abilities applicable to the category of seafarers (such as "Deck officer" and "Engine rating"). The special circumstances of individuals and for those who have specialized or limited duties should receive due consideration.
- If in doubt, the medical practitioner should quantify the degree or severity of any relevant impairment by means of objective tests, whenever appropriate tests are available, or by referring the candidate for further assessment.
- The term "assistance" means the use of another person to accomplish the task.
- The term "emergency duties" is used to cover all standard emergency response situations such as abandon ship or fire fighting as well as the procedures to be followed by each seafarer to secure personal survival.

#### Section B-I/10

Guidance regarding the recognition of certificates

- Training carried out under the STCW Convention which does not lead to the issue of a certificate of competency and on which information provided by a Party is found by the Maritime Safety Committee to give full and complete effect to the Convention in accordance with regulation I/7, paragraph 2 may be accepted by other Parties to the Convention as meeting the relevant training requirements thereof.
- Contacted Administrations should issue the documentary proof referred to in regulation I/10, paragraph 5 to enable port State control authorities to accept the same in lieu of endorsement of a certificate issued by another Party for a period of three months from the date of issue, providing the information listed below:
  - .1. seafarer's name
  - .2 date of birth
  - .3 number of the original Certificate of Competency
  - .4 capacity
  - .5 limitations
  - .6 contact details of the Administration
  - .7 dates of issue and expiry.
- 3 Such documentary proof may be made available by electronic means.

#### Section B-I/11

Guidance regarding the revalidation of certificates

- I The courses required by regulation I/11 should include relevant changes in marine legislation, technology and recommendations concerning the safety of life at sea, security and the protection of the marine environment.
- 2 A test may take the form of written or oral examination, the use of a simulator or other appropriate means.
- Approved seagoing service stated in section A-I/11, paragraph 1 may be served in an appropriate lower officer rank than that stated in the certificate held.
- If an application for revalidation of a certificate referred to in paragraph 1 of regulation I/11 is made within six months before expiry of the certificate, the certificate may be revalidated until the fifth anniversary of the date of validity, or extension of the validity, of the certificate.

#### Section B-I/12

Guidance regarding the use of simulators

When simulators are being used for training or assessment of competency, the following guidelines should be taken into consideration in conducting any such training or assessment.

# TRAINING AND ASSESSMENT IN RADAR OBSERVATION AND PLOTTING\*

- 2 Training and assessment in radar observation and plotting should:
  - .1 incorporate the use of radar simulation equipment; and
  - .2 conform to standards not inferior to those given in paragraphs 3 to 17 below.
- Demonstrations of and practice in radar observation should be undertaken, where appropriate, on live marine radar equipment, including the use of simulators. Plotting exercises should preferably be undertaken in real time, in order to increase trainees' awareness of the hazards of the improper use of radar data and improve their plotting techniques to a standard of radar plotting commensurate with that necessary for the safe execution of collision-avoidance manoeuvring under actual seagoing conditions.

#### General

# Factors affecting performance and accuracy

- An elementary understanding should be attained of the principles of radar, together with a full practical knowledge of:
  - range and bearing measurement, characteristics of the radar set which determine the quality of the radar display, radar antennae, polar diagrams, the effects of power radiated in directions outside the main beam, a non-technical description of the radar system, including variations in the features encountered in different types of radar set, performance monitors and equipment factors which affect maximum and minimum detection ranges and accuracy of information;
  - .2 the current marine radar performance specification adopted by the Organization\*\*;
  - the effects of the siting of the radar antenna, shadow sectors and arcs of reduced sensitivity, false echoes, effects of antenna height on detection ranges and of siting radar units and storing spares near magnetic compasses, including magnetic safe distances; and
  - .4 radiation hazards and safety precautions to be taken in the vicinity of antennae and open waveguides.

# Detection of misrepresentation of information, including false echoes and sea returns

- A knowledge of the limitations to target detection is essential, to enable the observer to estimate the dangers of failure to detect targets. The following factors should be emphasized:
  - .1 performance standard of the equipment;
  - .2 brilliance, gain and video processor control settings;
  - .3 radar horizon;

<sup>\*</sup> The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

See relevant/appropriate performance standards adopted by the Organization.

- .4 size, shape, aspect and composition of targets;
- .5 effects of the motion of the ship in a seaway;
- .6 propagation conditions;
- .7 meteorological conditions; sea clutter and rain clutter;
- .8 anti-clutter control settings;
- .9 shadow sectors; and
- .10 radar-to-radar interference.
- A knowledge should be attained of factors which might lead to faulty interpretation, including false echoes, effects of nearby pylons and large structures, effects of power lines crossing rivers and estuaries, echoes from distant targets occurring on second or later traces.
- A knowledge should be attained of aids to interpretation, including corner reflectors and radar beacons; detection and recognition of land targets; the effects of topographical features; effects of pulse length and beam width; radar-conspicuous and -inconspicuous targets; factors which affect the echo strength from targets.

#### Practice

#### Setting up and maintaining displays

- 8 A knowledge should be attained of:
  - .1 the various types of radar display mode; unstabilized ship's-head-up relative motion; ship's-head-up, course-up and north-up stabilized relative motion and true motion;
  - .2 the effects of errors on the accuracy of information displayed; effects of transmitting compass errors on stabilized and true-motion displays; effects of transmitting log errors on a true-motion display; and the effects of inaccurate manual speed settings on a true-motion display;
  - .3 methods of detecting inaccurate speed settings on true-motion controls; the effects of receiver noise limiting the ability to display weak echo returns, and the effects of saturation by receiver noise, etc.; the adjustment of operational controls; criteria which indicate optimum points of adjustment; the importance of proper adjustment sequence, and the effects of maladjusted controls; the detection of maladjustments and corrections of:
    - .3.1 controls affecting detection ranges; and
    - .3.2 controls affecting accuracy;
  - .4 the dangers of using radar equipment with maladjusted controls; and

the need for frequent regular checking of performance, and the relationship of the performance indicator to the range performance of the radar set.

#### Range and bearing

- 9 A knowledge should be attained of:
  - the methods of measuring ranges; fixed range markers and variable range markers;
  - .2 the accuracy of each method and the relative accuracy of the different methods;
  - .3 how range data are displayed; ranges at stated intervals, digital counter and graduated scale;
  - .4 the methods of measuring bearings; rotatable cursor on transparent disc covering the display, electronic bearing cursor and other methods;
  - bearing accuracy and inaccuracies caused by parallax, heading marker displacement, centre maladjustment;
  - .6 how bearing data are displayed; graduated scale and digital counter; and
  - .7 the need for regular checking of the accuracy of ranges and bearings, methods of checking for inaccuracies and correcting or allowing for inaccuracies.

# Plotting techniques and relative-motion concepts

Practice should be provided in manual plotting techniques, including the use of reflection plotters, with the objective of establishing a thorough understanding of the interrelated motion between own ship and other ships, including the effects of manoeuvring to avoid collision. At the preliminary stages of this training, simple plotting exercises should be designed to establish a sound appreciation of plotting geometry and relative-motion concepts. The degree of complexity of exercises should increase throughout the training course until the trainee has mastered all aspects of the subject. Competence can best be enhanced by exposing the trainee to real-time exercises performed on a simulator or using other effective means.

#### Identification of critical echoes

- A thorough understanding should be attained of:
  - .1 position fixing by radar from land targets and sea marks;
  - .2 the accuracy of position fixing by ranges and by bearings;
  - .3 the importance of cross-checking the accuracy of radar against other navigational aids; and
  - .4 the value of recording ranges and bearings at frequent, regular intervals when using radar as an aid to collision avoidance.

#### Course and speed of other ships

- 12 A thorough understanding should be attained of:
  - .1 the different methods by which course and speed of other ships can be obtained from recorded ranges and bearings, including:
    - .1.1 the unstabilized relative plot;
    - .1.2 the stabilized relative plot; and
    - ,1.3 the true plot; and
  - .2 the relationship between visual and radar observations, including detail and the accuracy of estimates of course and speed of other ships, and the detection of changes in movements of other ships.

# Time and distance of closest approach of crossing, meeting or overtaking ships

- 13 A thorough understanding should be attained of:
  - .1 the use of recorded data to obtain:
    - .1.1 measurement of closest approach distance and bearing;
    - .1.2 time to closest approach; and
  - .2 the importance of frequent, regular observations.

#### Detecting course and speed changes of other ships

- 14 A thorough understanding should be attained of:
  - .1 the effects of changes of course and/or speed by other ships on their tracks across the display;
  - .2 the delay between change of course or speed and detection of that change; and
  - .3 the hazards of small changes as compared with substantial changes of course or speed in relation to rate and accuracy of detection.

#### Effects of changes in own ship's course or speed or both

15 A thorough understanding of the effects on a relative-motion display of own ship's movements, and the effects of other ships' movements and the advantages of compass stabilization of a relative display.

- 16 In respect of true-motion displays, a thorough understanding should be attained of:
  - .1 the effects of inaccuracies of:
    - .1.1 speed and course settings; and
    - .1.2 compass stabilization data driving a stabilized relative-motion display;
  - .2 the effects of changes in course or speed or both by own ship on tracks of other ships on the display; and
  - .3 the relationship of speed to frequency of observations.

# Application of the International Regulations for Preventing Collisions at Sea, 1972, as amended

- 17 A thorough understanding should be attained of the relationship of the International Regulations for Preventing Collisions at Sea, 1972, as amended to the use of radar, including:
  - .1 action to avoid collision, dangers of assumptions made on inadequate information and the hazards of small alterations of course or speed;
  - .2 the advantages of safe speed when using radar to avoid collision;
  - .3 the relationship of speed to closest approach distance and time and to the manoeuvring characteristics of various types of ships;
  - .4 the importance of radar observation reports and radar reporting procedures being well defined;
  - .5 the use of radar in clear weather, to obtain an appreciation of its capabilities and limitations, compare radar and visual observations and obtain an assessment of the relative accuracy of information;
  - .6 the need for early use of radar in clear weather at night and when there are indications that visibility may deteriorate;
  - .7 comparison of features displayed by radar with charted features; and
  - .8 comparison of the effects of differences between range scales.

# TRAINING AND ASSESSMENT IN THE OPERATIONAL USE OF AUTOMATIC RADAR PLOTTING AIDS (ARPA)

- 18 Training and assessment in the operational use of automatic radar plotting aids (ARPA) should:
  - .1 require prior completion of the training in radar observation and plotting or combine that training with the training given in paragraphs 19 to 35 below;

<sup>\*</sup> The relevant IMO Model Course(s) and resolution MSC.64(67), as amended, may be of assistance in the preparation of courses.

- .2 incorporate the use of ARPA simulation equipment; and
- .3 conform to standards not inferior to those given in paragraphs 19 to 35 below.
- Where ARPA training is provided as part of the general training under the 1978 STCW Convention, masters, chief mates and officers in charge of a navigational watch should understand the factors involved in decision-making based on the information supplied by ARPA in association with other navigational data inputs, having a similar appreciation of the operational aspects and of system errors of modern electronic navigational systems, including ECDIS. This training should be progressive in nature, commensurate with the responsibilities of the individual and the certificates issued by Parties under the 1978 STCW Convention.

#### Theory and demonstration

#### Possible risks of over-reliance on ARPA

- 20 Appreciation that ARPA is only a navigational aid and:
  - .1 that its limitations, including those of its sensors, make over-reliance on ARPA dangerous, in particular for keeping a look-out; and
  - .2 the need to observe at all times the Principles to be observed in keeping a navigational watch and the Guidance on keeping a navigational watch.

#### Principal types of ARPA systems and their display characteristics

21 Knowledge of the principal types of ARPA systems in use; their various display characteristics and an understanding of when to use ground- or sea-stabilized modes and north-up, course-up or head-up presentations.

#### IMO performance standards for ARPA

An appreciation of the IMO performance standards for ARPA, in particular the standards relating to accuracy.\*

#### Factors affecting system performance and accuracy

- 23 Knowledge of ARPA sensor input performance parameters radar, compass and speed inputs and the effects of sensor malfunction on the accuracy of ARPA data.
- 24 Knowledge of: ...
  - .1 the effects of the limitations of radar range and bearing discrimination and accuracy and the limitations of compass and speed input accuracies on the accuracy of ARPA data; and
  - .2 factors which influence vector accuracy.

See relevant/appropriate performance standards adopted by the Organization.

### Tracking capabilities and limitations

- 25 Knowledge of:
  - .1 the criteria for the selection of targets by automatic acquisition;
  - .2 the factors leading to the correct choice of targets for manual acquisition;
  - .3 the effects on tracking of "lost" targets and target fading; and
  - .4 the circumstances causing "target swap" and its effects on displayed data.

#### Processing delays

26 Knowledge of the delays inherent in the display of processed ARPA information, particularly on acquisition and re-acquisition or when a tracked target manoeuvres.

# Operational warnings, their benefits and limitations

Appreciation of the uses, benefits and limitations of ARPA operational warnings and their correct setting, where applicable, to avoid spurious interference.

#### System operational tests

- 28 Knowledge of:
  - ..1 methods of testing for malfunctions of ARPA systems, including functional self-testing; and
  - .2 precautions to be taken after a malfunction occurs.

# Manual and automatic acquisition of targets and their respective limitations

29 Knowledge of the limits imposed on both types of acquisition in multi-target scenarios, and the effects on acquisition of target fading and target swap.

# True and relative vectors and typical graphic representation of target information and danger areas

- Thorough knowledge of true and relative vectors; derivation of targets' true courses and speeds, including:
  - threat assessment, derivation of predicted closest point of approach and predicted time to closest point of approach from forward extrapolation of vectors, the use of graphic representation of danger areas;
  - .2 the effects of alterations of course and/or speed of own ship and/or targets on predicted closest point of approach and predicted time to closest point of approach and danger areas;

- .3 the effects of incorrect vectors and danger areas; and
- .4 the benefit of switching between true and relative vectors.

#### Information on past positions of targets being tracked

31 Knowledge of the derivation of past positions of targets being tracked, recognition of historic data as a means of indicating recent manoeuvring of targets and as a method of checking the validity of the ARPA's tracking.

#### Practice

#### Setting up and maintaining displays

- 32 Ability to demonstrate:
  - .1 the correct starting procedure to obtain the optimum display of ARPA information;
  - .2 the selection of display presentation; stabilized relative-motion displays and true-motion displays;
    - .3 the correct adjustment of all variable radar display controls for optimum display of data;
    - .4 the selection, as appropriate, of required speed input to ARPA;
    - .5 the selection of ARPA plotting controls, manual/automatic acquisition, vector/graphic display of data;
    - .6 the selection of the timescale of vectors/graphics;
    - .7 the use of exclusion areas when automatic acquisition is employed by ARPA; and
    - .8 performance checks of radar, compass, speed input sensors and ARPA.

#### System operational tests

Ability to perform system checks and determine data accuracy of ARPA, including the trial manoeuvre facility, by checking against basic radar plot.

#### Obtaining information from the ARPA display

- Demonstrate the ability to obtain information in both relative- and true-motion modes of display, including:
  - .1 the identification of critical echoes;
  - .2 the speed and direction of target's relative movement;
  - .3 the time to, and predicted range at, target's closest point of approach;

- .4 the courses and speeds of targets;
- .5 detecting course and speed changes of targets and the limitations of such information;
- .6 the effect of changes in own ship's course or speed or both; and
- .7 the operation of the trial manoeuvre facility.

# Application of the International Regulations for Preventing Collisions at Sea, 1972, as amended

Analysis of potential collision situations from displayed information, determination and execution of action to avoid close-quarters situations in accordance with the International Regulations for Preventing Collisions at Sea, 1972, as amended, in force.

# TRAINING AND ASSESSMENT IN THE OPERATIONAL USE OF ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEMS (ECDIS)

#### Introduction

- When simulators are being used for training or assessment in the operational use of Electronic Chart Display and Information Systems (ECDIS), the following interim guidance should be taken into consideration in any such training or assessment.
- 37 Training and assessment in the operational use of the ECDIS should:
  - .1 incorporate the use of ECDIS simulation equipment; and
  - .2 conform to standards not inferior to those given in paragraphs 38 to 65 below.
- 38 ECDIS simulation equipment should, in addition to meeting all applicable performance standards set out in section A-I/12 of the STCW Code, as amended, be capable of simulating navigational equipment and bridge operational controls which meet all applicable performance standards adopted by the Organization, incorporate facilities to generate soundings and:
  - .1 create a real-time operating environment, including navigation control and communications instruments and equipment appropriate to the navigation and watchkeeping tasks to be carried out and the manoeuvring skills to be assessed; and
  - .2 realistically simulate "own ship" characteristics in open-water conditions, as well as the effects of weather, tidal stream and currents.
- Demonstrations of, and practice in, ECDIS use should be undertaken, where appropriate, through the use of simulators. Training exercises should preferably be undertaken in real time, in order to increase trainees' awareness of the hazards of the improper use of ECDIS. Accelerated timescale may be used only for demonstrations.

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#### General

#### Goals of an ECDIS training programme

- The ECDIS trainee should be able to:
  - operate the ECDIS equipment, use the navigational functions of ECDIS, select and assess all relevant information and take proper action in the case of a malfunction;
  - .2 state the potential errors of displayed data and the usual errors of interpretation;
  - .3 explain why ECDIS should not be relied upon as the sole reliable aid to navigation.

#### Theory and demonstration

- As the safe use of ECDIS requires knowledge and understanding of the basic principles governing ECDIS data and their presentation rules as well as potential errors in displayed data and ECDIS-related limitations and potential dangers, a number of lectures covering the theoretical explanation should be provided. As far as possible, such lessons should be presented within a familiar context and make use of practical examples. They should be reinforced during simulator exercises.
- For safe operation of ECDIS equipment and ECDIS-related information (use of the navigational functions of ECDIS, selection and assessment of all relevant information, becoming familiar with ECDIS man-machine interfacing), practical exercises and training on the ECDIS simulators should constitute the main content of the course.
- For the definition of training objectives, a structure of activities should be defined. A detailed specification of learning objectives should be developed for each topic of this structure.

#### Simulator exercises

- Exercises should be carried out on individual ECDIS simulators, or full-mission navigation simulators including ECDIS, to enable trainees to acquire the necessary practical skills. For real-time navigation exercises, navigation simulators are recommended to cover the complex navigation situation. The exercises should provide training in the use of the various scales, navigational modes, and display modes which are available, so that the trainees will be able to adapt the use of the equipment to the particular situation concerned.
- The choice of exercises and scenarios is governed by the simulator facilities available. If one or more ECDIS workstations and a full-mission simulator are available, the workstations may primarily be used for basic exercises in the use of ECDIS facilities and for passage-planning exercises, whereas full-mission simulators may primarily be used for exercises related to passage-monitoring functions in real time, as realistic as possible in connection with the total workload of a navigational watch. The degree of complexity of exercises should increase throughout the training programme until the trainee has mastered all aspects of the learning subject.
- Exercises should produce the greatest impression of realism. To achieve this, the scenarios should be located in a fictitious sea area. Situations, functions and actions for different

learning objectives which occur in different sea areas can be integrated into one exercise and experienced in real time.

The main objective of simulator exercises is to ensure that trainees understand their responsibilities in the operational use of ECDIS in all safety-relevant aspects and are thoroughly familiar with the system and equipment used.

# Principal types of ECDIS systems and their display characteristics

- The trainee should gain knowledge of the principal types of ECDIS in use; their various display characteristics, data structure and an understanding of:
  - .1 differences between vector and raster charts;
  - .2 differences between ECDIS and ECS;
  - .3 differences between ECDIS and RCDS\*;
  - .4 characteristics of ECDIS and their different solutions; and
  - .5 characteristics of systems for special purposes (unusual situations/emergencies).

#### Risks of over-reliance on ECDIS

- The training in ECDIS operational use should address:
  - .1 the limitations of ECDIS as a navigational tool;
  - .2 potential risk of improper functioning of the system;
  - .3 system limitations, including those of its sensors;
  - .4 hydrographic data inaccuracy; limitations of vector and raster electronic charts (ECDIS vs RCDS and ENC vs RNC); and
  - .5 potential risk of human errors.

Emphasis should be placed on the need to keep a proper look-out and to perform periodical checking, especially of the ship's position, by ECDIS-independent methods.

### Detection of misrepresentation of information

- Knowledge of the limitations of the equipment and detection of misrepresentation of information is essential for the safe use of ECDIS. The following factors should be emphasized during training:
  - .1 performance standards of the equipment;
  - .2 radar data representation on an electronic chart, elimination of discrepancy between the radar image and the electronic chart;

SN/Circ.207/Rev.1 - Differences between RCDS and ECDIS.

- .3 possible projection discrepancies between an electronic and paper charts;
- .4 possible scale discrepancies (overscaling and underscaling) in displaying an electronic chart and its original scale;
- .5 effects of using different reference systems for positioning;
- .6 effects of using different horizontal and vertical datums;
- .7 effects of the motion of the ship in a seaway;
- 8 ECDIS limitations in raster chart display mode;
- .9 potential errors in the display of:
  - .9.1 the own ship's position;
  - .9.2 radar data and ARPA and AIS information;
  - .9.3 different geodetic coordinate systems; and
- .10 verification of the results of manual or automatic data correction:
  - .10.1 comparison of chart data and radar picture; and
  - .10.2 checking the own ship's position by using the other independent position-fixing systems.
- False interpretation of the data and proper action taken to avoid errors of interpretation should be explained. The implications of the following should be emphasized:
  - .1 ignoring overscaling of the display;
  - .2 uncritical acceptance of the own ship's position;
  - .3 confusion of display mode;
  - .4 confusion of chart scale;
  - .5 confusion of reference systems;
  - .6 different modes of presentation;
  - .7 different modes of vector stabilization;
  - .8 differences between true north and gyro north (radar);
  - .9 using the same data reference system;
  - .10 using the appropriate chart scale;
  - .11 using the best-suited sensor to the given situation and circumstances;

- .12 entering the correct values of safety data:
  - .12.1 the own ship's safety contour,
  - .12.2 safety depth (safe water), and
  - .12.3 events; and
- .13 proper use of all available data.
- Appreciation that RCDS is only a navigational aid and that, when operating in the RCDS mode, the ECDIS equipment should be used together with an appropriate portfolio of up-to-date paper charts:
  - .1 appreciation of the differences in operation of RCDS mode as described in SN.1/Circ.207/Rev.1 "Differences between RCDS and ECDIS"; and
  - .2 ECDIS, in any mode, should be used in training with an appropriate portfolio of up-to-date charts.

### Factors affecting system performance and accuracy

- An elementary understanding should be attained of the principles of ECDIS, together with a full practical knowledge of:
  - starting and setting up ECDIS; connecting data sensors: satellite and radio navigation system receivers, radar, gyro-compass, log, echo-sounder; accuracy and limitations of these sensors, including effects of measurement errors and ship's position accuracy, manoeuvring on the accuracy of course indicator's performance, compass error on the accuracy of course indication, shallow water on the accuracy of log performance, log correction on the accuracy of speed calculation, disturbance (sea state) on the accuracy of an echo-sounder performance; and
  - .2 the current performance standards for electronic chart display and information systems adopted by the Organization.\*

#### Practice

#### Setting up and maintaining display

- 54 Knowledge and skills should be attained in:
  - .1 the correct starting procedure to obtain the optimum display of ECDIS information;
  - .2 the selection of display presentation (standard display, display base, all other information displayed individually on demand);

See relevant/appropriate performance standards adopted by the Organization.

- .3 the correct adjustment of all variable radar/ARPA display controls for optimum display of data;
- .4 the selection of convenient configuration;
- .5 the selection, as appropriate, of required speed input to ECDIS;
- .6 the selection of the timescale of vectors; and
- .7 performance checks of position, radar/ARPA, compass, speed input sensors and ECDIS.

#### Operational use of electronic charts

- 55 Knowledge and skills should be attained in:
  - .1 the main characteristics of the display of ECDIS data and selecting proper information for navigational tasks;
  - .2 the automatic functions required for monitoring ship's safety, such as display of position, heading/gyro course, speed, safety values and time;
  - .3 the manual functions (by the cursor, electronic bearing line, range rings);
  - .4 selecting and modification of electronic chart content;
  - .5 scaling (including underscaling and overscaling);
  - .6 zooming;
  - .7 setting of the own ship's safety data;
  - .8 using a daytime or night-time display mode;
  - .9 reading all chart symbols and abbreviations;
  - .10 using different kinds of cursors and electronic bars for obtaining navigational data;
  - .11 viewing an area in different directions and returning to the ship's position;
  - .12 finding the necessary area, using geographical coordinates;
  - .13 displaying indispensable data layers appropriate to a navigational situation;
  - .14 selecting appropriate and unambiguous data (position, course, speed, etc.);
  - .15 entering the mariner's notes;
  - .16 using north-up orientation presentation and other kinds of orientation; and
  - .17 using true- and relative-motion modes.

#### Route planning

- 56 Knowledge and skills should be attained in:
  - .1 loading the ship's characteristics into ECDIS;
  - .2 selection of a sea area for route planning:
    - .2.1 reviewing required waters for the sea passage, and
    - .2.2 changing over of chart scale;
  - .3 verifying that proper and updated charts are available;
  - .4 route planning on a display by means of ECDIS, using the graphic editor, taking into consideration rhumb line and great-circle sailing:
    - .4.1 using the ECDIS database for obtaining navigational, hydro-meteorological and other data;
    - .4.2 taking into consideration turning radius and wheel-over points/lines when they are expressed on chart scale;
    - .4.3 marking dangerous depths and areas and exhibiting guarding depth contours;
    - .4.4 marking waypoints with the crossing depth contours and critical cross-track deviations, as well as by adding, replacing and erasing of waypoints;
    - .4.5 taking into consideration safe speed;
    - .4.6 checking pre-planned route for navigational safety; and
    - .4.7 generating alarms and warnings;
  - .5 route planning with calculation in the table format, including:
    - .5.1 waypoints selection;
    - .5.2 recalling the waypoints list;
    - .5.3 planning notes;
    - .5.4 adjustment of a planned route;
    - .5.5 checking a pre-planned route for navigational safety;
    - .5.6 alternative route planning;
    - .5.7 saving planned routes, loading and unloading or deleting routes;
    - .5.8 making a graphic copy of the monitor screen and printing a route;

- .5.9 editing and modification of the planned route;
- .5.10 setting of safety values according to the size and manoeuvring parameters of the vessel;
- .5.11 back-route planning; and
- .5.12. connecting several routes.

#### Route monitoring

- 57 Knowledge and skills should be attained in:
  - .1 using independent data to control ship's position or using alternative systems within ECDIS;
  - .2 using the look-ahead function:
    - .2.1 changing charts and their scales;
    - .2.2 reviewing navigational charts;
    - .2.3 vector time selecting;
    - .2.4 predicting the ship's position for some time interval;
    - .2.5 changing the pre-planned route (route modification);
    - .2.6 entering independent data for the calculation of wind drift and current allowance;
    - .2.7 reacting properly to the alarm;
    - .2.8 entering corrections for discrepancies of the geodetic datum;
    - .2.9 displaying time markers on a ship's route;
    - .2.10 entering ship's position manually; and
    - .2.11 measuring coordinates, course, bearings and distances on a chart.

#### Alarm handling

- 58 Knowledge and ability to interpret and react properly to all kinds of systems, such as navigational sensors, indicators, data and charts alarms and indicator warnings, including, switching the sound and visual alarm signalling system, should be attained in case of:
  - .1 absence of the next chart in the ECDIS database;
  - .2 crossing a safety contour;
  - .3 exceeding cross-track limits;
  - .4 deviation from planned route;

- .5 approaching a waypoint;
- .6 approaching a critical point;
- .7 discrepancy between calculated and actual time of arrival to a waypoint;
- .8 information on under-scaling or over-scaling;
- .9 approaching an isolated navigational danger or danger area;
- .10 crossing a specified area;
- .11 selecting a different geodetic datum;
- .12 approaching other ships;
- .13 watch termination;
- .14 switching timer;
- .15 system test failure;
- .16 malfunctioning of the positioning system used in ECDIS;
- .17 failure of dead-reckoning; and
- .18 inability to fix vessel's position using the navigational system.

# Manual correction of a ship's position and motion parameters

- 59 Knowledge and skills should be attained in manually correcting:
  - .1 the ship's position in dead-reckoning mode, when the satellite and radio navigation system receiver is switched off;
  - .2 the ship's position, when automatically obtained coordinates are inaccurate; and
  - .3 course and speed values.

### Records in the ship's log

- Knowledge and skills should be attained in:
  - .1 automatic voyage recording;
  - .2 reconstruction of past track, taking into account:
    - .2.1 recording media;
    - .2.2 recording intervals;
    - .2.3 verification of database in use;

- .3 viewing records in the electronic ship's log;
- .4 instant recording in the electronic ship's log;
- .5 changing ship's time;
- .6 entering the additional data;
- .7 printing the content of the electronic ship's log;
- .8 setting up the automatic record time intervals;
- .9 composition of voyage data and reporting; and
- .10 interface with a voyage data recorder (VDR).

#### Chart updating

- Knowledge and skills should be attained in:
  - .1 performing manual updating of electronic charts. Special attention should be paid to reference-ellipsoid conformity and to conformity of the measurement units used on a chart and in the correction text;
  - .2 performing semi-automatic updating of electronic charts, using the data obtained on electronic media in the electronic chart format; and
  - .3 performing automatic updating of electronic charts, using update files obtained via electronic data communication lines.

In the scenarios where non-updated data are employed to create a critical situation, trainees should be required to perform ad hoc updating of the chart.

### Operational use of ECDIS where radar/ARPA is connected

- 62 Knowledge and skills should be attained in:
  - .1 connecting ARPA to ECDIS;
  - .2 indicating target's speed vectors;
  - .3 indicating target's tracks;
  - .4 archiving target's tracks;
  - 1.5 viewing the table of the targets;
  - .6 checking alignment of radar overlay with charted geographic features;
  - .7 simulating one or more manoeuvres;
  - .8 corrections to own ship's position, using a reference point captured by ARPA; and
  - .9 corrections using the ARPA's cursor and electronic bar.

See also section B-I/12, Guidance regarding the use of simulators (pertaining to radar and ARPA), especially paragraphs 17 to 19 and 36 to 38.

# Operational use of ECDIS where AIS is connected

- 63 Knowledge and skills should be attained in:
  - .1 interface with AIS;
  - .2 interpretation of AIS data;
  - .3 indicating target's speed vectors;
  - .4 indicating target's tracks; and
  - .5 archiving target's tracks.

# Operational warnings, their benefits and limitations

Trainees should gain an appreciation of the uses, benefits and limitations of ECDIS operational warnings and their correct setting, where applicable, to avoid spurious interference.

### System operational tests

- 65 Knowledge and skills should be attained in:
  - .1 methods of testing for malfunctions of ECDIS, including functional self-testing;
  - .2 precautions to be taken after a malfunction occurs; and
  - .3 adequate back-up arrangements (take over and navigate using the back-up system).

# Debriefing exercise

The instructor should analyze the results of all exercises completed by all trainees and print them out. The time spent on the debriefing should occupy between 10% and 15% of the total time used for simulator exercises.

# RECOMMENDED PERFORMANCE STANDARDS FOR NON-MANDATORY TYPES OF SIMULATION

- Performance standards for non-mandatory simulation equipment used for training and/or assessment of competence or demonstration of skills are set out hereunder. Such forms of simulation include, but are not limited to, the following types:
  - .1 navigation and watchkeeping;
  - .2 ship handling and manoeuvring;
  - .3 cargo handling and stowage;
  - .4 reporting and radiocommunications; and
  - .5 main and auxiliary machinery operation.

#### Navigation and watchkeeping simulation

- Navigation and watchkeeping simulation equipment should, in addition to meeting all applicable performance standards set out in section A-I/12, be capable of simulating navigational equipment and bridge operational controls which meet all applicable performance standards adopted by the Organization, incorporate facilities to generate soundings and:
  - create a real-time operating environment, including navigation control and communications instruments and equipment appropriate to the navigation and watchkeeping tasks to be carried out and the manoeuvring skills to be assessed;
  - .2 provide a realistic visual scenario by day or by night, including variable visibility, or by night only as seen from the bridge, with a minimum horizontal field of view available to the trainee in viewing sectors appropriate to the navigation and watchkeeping tasks and objectives;
  - .3 realistically simulate "own ship" dynamics in open-water conditions, including the effects of weather, tidal stream, currents and interaction with other ships; and
  - .4 realistically simulate VTS communication procedures between ship and shore.

#### · Ship handling and manoeuvring simulation

- In addition to meeting the performance standards set out in paragraph 37, ship handling simulation equipment should:
  - provide a realistic visual scenario as seen from the bridge, by day and by night, with variable visibility throughout a minimum horizontal field of view available to the trainee in viewing sectors appropriate to the ship handling and manoeuvring training tasks and objectives;\*\*
  - .2 realistically simulate "own ship" dynamics in restricted waterways, including shallow-water and bank effects.
- 70 Where manned scale models are used to provide ship handling and manoeuvring simulation, in addition to the performance standards set out in paragraphs 68.3 and 69.2, such equipment should:
  - .I incorporate scaling factors which present accurately the dimensions, areas, volume and displacement, speed, time and rate of turn of a real ship; and
  - .2 incorporate controls for the rudder and engines, to the correct timescale.

#### Cargo handling and stowage simulation

Cargo handling simulation equipment should be capable of simulating cargo handling and control equipment which meets all applicable performance standards adopted by the Organization and incorporate facilities to:

<sup>\*</sup> See relevant/appropriate performance standards adopted by the Organization.

<sup>\*\*</sup> The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

<sup>\*\*\*</sup> No standards have as yet been adopted by the Organization.

- .1 create an effective operational environment, including a cargo-control station with such instrumentation as may be appropriate to the particular type of cargo system modelled;
- .2 model loading and unloading functions and stability and stress data appropriate to the cargo-handling tasks to be carried out and the skills to be assessed; and
- .3 simulate loading, unloading, ballasting and deballasting operations and appropriate associated calculations for stability, trim, list, longitudinal strength, torsional stress and damage stability.

# GMDSS communication simulation

- GMDSS communication simulation equipment should be capable of simulating GMDSS communication equipment which meets all applicable performance standards adopted by the Organization\*\* and incorporate facilities to:
  - .1 simulate the operation of VHF, VHF-DSC, NAVTEX, EPIRB and watch receiver equipment as required for the Restricted Operator's Certificate (ROC);
  - simulate the operation of INMARSAT-A, -B and -C ship earth stations, MF/HF NBDP, MF/HF-DSC, VHF, VHF-DSC, NAVTEX, EPIRB and watch receiver equipment as required for the General Operator's Certificate (GOC);
  - .3 provide voice communication with background noise;
  - .4 provide a printed text communication facility; and
  - .5 create a real-time operating environment, consisting of an integrated system, incorporating at least one instructor/assessor station and at least two GMDSS ship or shore stations.

# Main and auxiliary machinery operation simulation

- 73 Engine-room simulation equipment should be capable of simulating a main and auxiliary machinery system and incorporate facilities to:
  - .1 create a real-time environment for seagoing and harbour operations, with communication devices and simulation of appropriate main and auxiliary propulsion machinery equipment and control panels;
  - .2 simulate relevant sub-systems that should include, but not be restricted to, boiler, steering gear, electrical power general and distribution systems, including emergency power supplies, and fuel, cooling water, refrigeration, bilge and ballast systems;
  - 3 monitor and evaluate engine performance and remote sensing systems;
  - .4 simulate machinery malfunctions;

<sup>\*</sup> The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

<sup>\*</sup> See relevant/appropriate performance standards adopted by the Organization.

- allow for the variable external conditions to be changed so as to influence the simulated operations: weather, ship's draught, seawater and air temperatures;
- allow for instructor-controlled external conditions to be changed: deck steam, accommodation steam, deck air, ice conditions, deck cranes, heavy power, bow thrust, ship load;
- .7 allow for instructor-controlled simulator dynamics to be changed: emergency run, process responses, ship responses; and
- .8 provide a facility to isolate certain processes, such as speed, electrical system, diesel oil system, lubricating oil system, heavy oil system, seawater system, steam system, exhaust boiler and turbo generator, for performing specific training tasks.

#### Section B-I/13

Guidance regarding the conduct of trials

(No provisions)

#### Section B-I/14

Guidance regarding responsibilities of companies and recommended responsibilities of masters and crew members

#### Companies

- Companies should provide ship-specific introductory programmes aimed at assisting newly employed seafarers to familiarize themselves with all procedures and equipment relating to their areas of responsibility. Companies should also ensure that:
  - all seafarers on a ship fitted with free-fall lifeboats should receive familiarization training in boarding and launching procedures for such lifeboats;
  - .2 prior to joining a ship, seafarers assigned as operating crew of free-fall lifeboats should have undergone appropriate training in boarding, launching and recovering of such lifeboats, including participation on at least one occasion in a free-fall launch; and
  - .3 personnel who may be required to operate the GMDSS equipment receive GMDSS familiarization training, on joining the ship and at appropriate intervals thereafter.
- 2 The familiarization training required by paragraph 3 of section A-I/14 should at least ensure attainment of the abilities that are appropriate to the capacity to be filled and the duties and responsibilities to be taken up, as follows:

#### · Design and operational limitations

.1 Ability to properly understand and observe any operational limitations imposed on the ship, and to understand and apply performance restrictions, including speed limitations in adverse weather, which are intended to maintain the safety of life, ship and cargo.

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

# Procedures for opening, closing and securing hull openings

.2 Ability to apply properly the procedures established for the ship regarding the opening, closing and securing of bow, stern, and side doors and ramps and to correctly operate the related systems.

# Legislation, codes and agreements affecting ro-ro passenger ships

.3 Ability to understand and apply international and national requirements for ro-ro passenger ships relevant to the ship concerned and the duties to be performed.

# Stability and stress requirements and limitations

Ability to take proper account of stress limitations for sensitive parts of the ship, such as bow doors and other closing devices that maintain watertight integrity, and of special stability considerations which may affect the safety of ro-ro passenger ships.

# Procedures for the maintenance of special equipment on ro-ro passenger ships

.5 Ability to apply properly the shipboard procedures for maintenance of equipment peculiar to ro-ro passenger ships such as bow, stern and side doors and ramps, scuppers and associated systems.

# Loading and cargo securing manuals and calculators

.6 Ability to make proper use of the loading and securing manuals in respect of all types of vehicles and rail cars where applicable, and to calculate and apply stress limitations for vehicle decks.

### Dangerous cargo areas

.7 Ability to ensure proper observance of special precautions and limitations applying to designated dangerous cargo areas.

### Emergency procedures

- .8 Ability to ensure proper application of any special procedures to:
  - .8.1 prevent or reduce the ingress of water on vehicle decks;
  - .8.2 remove water from vehicle decks; and
  - .8.3 minimize effects of water on vehicle decks.

#### Master

- The master should take all steps necessary to implement any company instructions issued in accordance with section A-I/14. Such steps should include:
  - .1 identifying all seafarers who are newly employed on board the ship before they are assigned to any duties;

- .2 providing the opportunity for all newly arrived seafarers to:
  - .2.1 visit the spaces in which their primary duties will be performed;
  - .2.2 get acquainted with the location, controls and display features of equipment they will be operating or using;
  - .2.3 activate the equipment when possible, and perform functions, using the controls on the equipment; and
  - .2.4 observe and ask questions of someone who is already familiar with the equipment, procedures and other arrangements, and who can communicate information in a language which the seafarer understands; and
- .3 providing for a suitable period of supervision when there is any doubt that a newly employed seafarer is familiar with the shipboard equipment, operating procedures and other arrangements needed for the proper performance of his or her duties.

#### Crew members

- Seafarers who are newly assigned to a ship should take full advantage of every opportunity provided to become familiar with the shipboard equipment, operating procedures and other arrangements needed for the proper performance of their duties. Immediately upon arriving on board for the first time, each seafarer has the responsibility to become acquainted with the ship's working environment, particularly with respect to new or unfamiliar equipment, procedures or arrangements.
- Seafarers who do not promptly attain the level of familiarity required for performing their duties have the obligation to bring this fact to the attention of their supervisor or to the attention of the crew member designated in accordance with section A-I/14, paragraph 2.2, and to identify any equipment, procedure or arrangement which remains unfamiliar.

#### Section B-I/15

Guidance regarding transitional provisions

(No provisions)

#### CHAPTER II

# Guidance regarding the master and the deck department

Section B-II/1

Guidance regarding the certification of officers in charge of a navigational watch on ships of 500 gross tonnage or more

#### Training

- Every candidate for certification as officer in charge of a navigational watch should have completed a planned and structured programme of training designed to assist a prospective officer to achieve the standard of competence in accordance with table A-II/1.
- The structure of the programme of training should be set out in a training plan which clearly expresses, for all parties involved, the objectives of each stage of training on board and ashore. It is important that the prospective officer, tutors, ships' staff and company personnel are clear about the competences which are to be achieved at the end of the programme and how they are to be achieved through a combination of education, training and practical experience on board and ashore.
- The mandatory periods of seagoing service are of prime importance in learning the job of being a ship's officer and in achieving the overall standard of competence required. Properly planned and structured, the periods of seagoing service will enable prospective officers to acquire and practice skills and will offer opportunities for competences achieved to be demonstrated and assessed.
- Where the seagoing service forms part of an approved training programme, the following principles should be observed:
  - .1 The programme of onboard training should be an integral part of the overall training plan.
  - .2 The programme of onboard training should be managed and coordinated by the company which manages the ship on which the seagoing service is to be performed.
  - 3 The prospective officer should be provided with a training record book to enable a comprehensive record of practical training and experience at sea to be maintained. The training record book should be laid out in such a way that it can provide detailed information about the tasks and duties which should be undertaken and the progress towards their completion. Duly completed, the record book will provide unique evidence that a structured programme of onboard training has been completed which can be taken into account in the process of evaluating competence for the issue of a certificate.
  - .4 At all times, the prospective officer should be aware of two identifiable individuals who are immediately responsible for the management of the programme of onboard training. The first of these is a qualified seagoing officer,

<sup>\*</sup> The relevant IMO Model Course(s) and a similar document produced by the International Shipping Federation may be of assistance in the preparation of training record books.

referred to as the "shipboard training officer", who, under the authority of the master, should organize and supervise the programme of training for the duration of each voyage. The second should be a person nominated by the company, referred to as the "company training officer", who should have an overall responsibility for the training programme and for coordination with colleges and training institutions.

.5 The company should ensure that appropriate periods are set aside for completion of the programme of onboard training within the normal operational requirements of the ship.

#### Roles and responsibilities

- 5 The following section summarizes the roles and responsibilities of those individuals involved in organizing and conducting onboard training:
  - .1 The company training officer should be responsible for:
    - .1.1 overall administration of the programme of training;
    - .1.2 monitoring the progress of the prospective officer throughout; and
    - .1.3 issuing guidance as required and ensuring that all concerned with the training programme play their parts.
  - .2 The shipboard training officer should be responsible for:
    - .2.1 organizing the programme of practical training at sea;
    - .2.2 ensuring, in a supervisory capacity, that the training record book is properly maintained and that all other requirements are fulfilled; and
    - .2.3 making sure, so far as is practicable, that the time the prospective officer spends on board is as useful as possible in terms of training and experience, and is consistent with the objectives of the training programme, the progress of training and the operational constraints of the ship.
  - .3 The master's responsibilities should be to:
    - .3.1 provide the link between the shipboard training officer and the company training officer ashore;
    - .3.2 fulfil the role of continuity if the shipboard training officer is relieved during the voyage; and
    - .3.3 ensure that all concerned are effectively carrying out the onboard training programme.
  - .4 The prospective officer's responsibilities should be to:
    - .4.1 follow diligently the programme of training as laid down;

- .4.2 make the most of the opportunities presented, be they in or outside working hours; and
- .4.3 keep the training record book up to date and ensure that it is available at all times for scrutiny.

#### Induction

At the beginning of the programme and at the start of each voyage on a different ship, prospective officers should be given full information and guidance as to what is expected of them and how the training programme is to be organized. Induction presents the opportunity to brief prospective officers about important aspects of the tasks they will be undertaking, with particular regard to safe working practices and protection of the marine environment.

### Shipboard programme of training

- The training record book should contain, amongst other things, a number of training tasks or duties which should be undertaken as part of the approved programme of onboard training. Such tasks and duties should relate to at least the following areas:
  - .1 steering systems;
  - .2 general seamanship;
  - .3 mooring, anchoring and port operations;
  - .4 life-saving and fire-fighting appliances;
  - .5 systems and equipment;
  - .6 cargo work;
  - .7 bridge work and watchkeeping; and
  - .8 engine-room familiarization.
- 8 It is extremely important that the prospective officer is given adequate opportunity for supervised bridge watchkeeping experience, particularly in the later stages of the onboard training programme.
- The performance of the prospective officers in each of the tasks and duties itemized in the training record book should be initialled by a qualified officer when, in the opinion of the officer concerned, a prospective officer has achieved a satisfactory standard of proficiency. It is important to appreciate that a prospective officer may need to demonstrate ability on several occasions before a qualified officer is confident that a satisfactory standard has been achieved.

#### Monitoring and reviewing

Guidance and reviewing are essential to ensure that prospective officers are fully aware of the progress they are making and to enable them to join in decisions about their future programme. To be effective, reviews should be linked to information gained through the training record book and other sources as appropriate. The training record book should be scrutinized and

endorsed formally by the master and the shipboard training officer at the beginning, during and at the end of each voyage. The training record book should also be examined and endorsed by the company training officer between voyages.

#### Assessment of abilities and skills in navigational watchkeeping

- A candidate for certification who is required to have received special training and assessment of abilities and skills in navigational watchkeeping duties should be required to provide evidence, through demonstration either on a simulator or on board ship as part of an approved programme of shipboard training, that the skills and ability to perform as officer in charge of a navigational watch in at least the following areas have been acquired, namely to:
  - .1 prepare for and conduct a passage, including:
    - .1.1 interpreting and applying information obtained from charts;
    - .1.2 fixing position in coastal waters;
    - .1.3 applying basic information obtained from tide tables and other nautical publications;
    - .1.4 checking and operating bridge equipment;
    - .1.5 checking magnetic and gyro-compasses;
    - .1.6 assessing available meteorological information;
    - .1.7 using celestial bodies to fix position;
    - .1.8 determining the compass error by celestial and terrestrial means; and
    - .1.9 performing calculations for sailings of up to 24 hours;
  - .2 operate and apply information obtained from electronic navigation systems;
  - .3 operate radar, ARPA and ECDIS and apply radar information for navigation and collision avoidance;
  - .4 operate propulsion and steering systems to control heading and speed;
  - .5. implement navigational watch routines and procedures;
  - .6 implement the manoeuvres required for rescue of persons overboard;
  - .7 initiate action to be taken in the event of an imminent emergency situation (e.g., fire, collision, stranding) and action in the immediate aftermath of an emergency;
  - .8 initiate action to be taken in event of malfunction or failure of major items of equipment or plant (e.g., steering gear, power, navigation systems);

- .9 conduct radiocommunications and visual and sound signalling in normal and emergency situations; and
- .10 monitor and operate safety and alarm systems, including internal communications.
- 12 Assessment of abilities and skills in navigational watchkeeping should:
  - .1 be made against the criteria for evaluating competence for the function of navigation set out in table A-II/1;
  - .2 ensure that the candidate performs navigational watchkeeping duties in accordance with the Principles to be observed in keeping a safe navigational watch (section A-VIII/2, part 4-1) and the Guidance on keeping a navigational watch (section B-VIII/2, part 4-1).

# Evaluation of competence

- The standard of competence to be achieved for certification as officer in charge of a navigational watch is set out in table A-II/1. The standard specifies the knowledge and skill required and the application of that knowledge and skill to the standard of performance required on board ship.
- Scope of knowledge is implicit in the concept of competence. Assessment of competence should, therefore, encompass more than the immediate technical requirements of the job, the skills and tasks to be performed, and should reflect the broader aspects needed to meet the full expectations of competent performance as a ship's officer. This includes relevant knowledge, theory, principles and cognitive skills which, to varying degrees, underpin all levels of competence. It also encompasses proficiency in what to do, how and when to do it, and why it should be done. Properly applied, this will help to ensure that a candidate can:
  - .1 work competently in different ships and across a range of circumstances;
  - .2 anticipate, prepare for and deal with contingencies; and
  - .3 adapt to new and changing requirements.
- The criteria for evaluating competence (column 4 of table A-II/1) identify, primarily in outcome terms, the essential aspects of competent performance. They are expressed so that assessment of a candidate's performance can be made against them and should be adequately documented in the training record book.
- 16 Evaluation of competence is the process of:
  - .1 collecting sufficient valid and reliable evidence about the candidate's knowledge, understanding and proficiency to accomplish the tasks, duties and responsibilities listed in column 1 of table A-II/1; and
  - .2 judging that evidence against the criteria specified in the standard.
- 17 The arrangements for evaluating competence should be designed to take account of different methods of assessment which can provide different types of evidence about candidates' competence, e.g.:

- .1 direct observation of work activities (including seagoing service);
- .2 skills/proficiency/competency tests;
- .3 projects and assignments;
- .4 evidence from previous experience; and
- .5 written, oral and computer-based questioning techniques.
- One or more of the first four methods listed should almost invariably be used to provide evidence of ability, in addition to appropriate questioning techniques to provide evidence of supporting knowledge and understanding.

#### Training in celestial navigation

- 19 The following areas summarize the recommended training in celestial navigation:
  - .1 correctly adjust sextant for adjustable errors;
  - .2 determine corrected reading of the sextant altitude of celestial bodies;
  - .3 accurate sight reduction computation, using a preferred method;
  - .4 calculate the time of meridian altitude of the sun;
  - .5 calculate latitude by Polaris or by meridian altitude of the sun;
  - .6 accurate plotting of position line(s) and position fixing;
  - .7 determine time of visible rising/setting sun by a preferred method;
  - .8 identify and select the most suitable celestial bodies in the twilight period;
  - .9 determine compass error by azimuth or by amplitude, using a preferred method;
  - .10 nautical astronomy as required to support the required competence in paragraphs 19,1 to 19.9 above.
- Training in celestial navigation may include the use of electronic nautical almanac and celestial navigation calculation software.

#### Section B-II/2

Guidance regarding the certification of masters and chief mates on ships of 500 gross tonnage or more

(See section B-II/1 for guidance.)

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

#### Section B-II/3

Guidance regarding the certification of officers in charge of a navigational watch and of masters on ships of less than 500 gross tonnage

(See section B-II/1 for guidance.)

#### Section B-II/4

Guidance regarding the training and certification of ratings forming part of a navigational watch

- In addition to the requirements stated in table A-II/4 of this Code, Parties are encouraged, for safety reasons, to include the following subjects in the training of ratings forming part of a navigational watch:
  - a basic knowledge of the International Regulations for Preventing Collisions .1 at Sea, 1972, as amended;
  - rigging a pilot ladder; .2
  - an understanding of wheel orders given by pilots in English; .3
  - training for proficiency in survival craft and rescue boats; .4
  - support duties when berthing and unberthing and during towing operations; .5
  - a basic knowledge of anchoring; .6
  - a basic knowledge of dangerous cargoes; .7
  - a basic knowledge of stowage procedures and arrangements for bringing stores on .8 board; and
  - a basic knowledge of deck maintenance and of tools used on deck. ,9

#### Section B-II/5

Guidance regarding the certification of ratings as able seafarer deck

Onboard training should be documented in an approved training record book.

#### CHAPTER III

#### Guidance regarding the engine department

#### Section B-III/1

Guidance regarding the certification of officers in charge of an engineering watch in a manned engine-room or as designated duty engineers in a periodically unmanned engine-room

- In table A-III/1, the tools referred to should include hand tools, common measuring equipment, centre lathes, drilling machines, welding equipment and milling machines as appropriate.
- 2 Training in workshop skills ashore can be carried out in a training institution or approved workshop.
- 3 Onboard training should be adequately documented in the training record book by qualified assessors.

#### Section B-III/2

Guidance regarding the certification of chief engineer officers and second engineer officers of ships powered by main propulsion machinery of 3,000 kW propulsion power or more

#### (No provisions)

Guidance regarding training of engineering personnel having management responsibilities for the operation and safety of electrical power plant above 1,000 volts

- 1 Training of engineering personnel having management responsibilities for the operation and safety of electrical power plant of more than 1,000 V should at least include:
  - .1 the functional, operational and safety requirements for a marine high-voltage system;
  - .2 assignment of suitably qualified personnel to carry out maintenance and repair of high-voltage switchgear of various types;
  - .3 taking remedial action necessary during faults in a high-voltage system;
  - .4 producing a switching strategy for isolating components of a high-voltage system;
  - .5 selecting suitable apparatus for isolation and testing of high-voltage equipment;
  - .6 carrying out a switching and isolation procedure on a marine high-voltage system, complete with safety documentation; and
  - .7 performing tests of insulation resistance and polarization index on high-voltage equipment.

Section B-III/3

Guidance regarding the 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

(No provisions)

Section B-III/4

Guidance regarding the training and certification of ratings forming part of a watch in a manned engine-room or designated to perform duties in a periodically unmanned engine-room

- In addition to the requirements stated in section A-III/4 of this Code, Parties are encouraged, for safety reasons, to include the following items in the training of ratings forming part of an engineering watch:
  - a basic knowledge of routine pumping operations, such as bilge, ballast and cargo .1 pumping systems;
  - a basic knowledge of electrical installations and the associated dangers; .2
  - a basic knowledge of maintenance and repair of machinery and tools used in the .3 engine-room; and
  - a basic knowledge of stowage and arrangements for bringing stores on board. .4

Section B-III/5

Guidance regarding the certification of ratings as able seafarer engine

Onboard training should be documented in an approved training record book.

Section B-III/6

Guidance regarding training and certification for electro-technical officers

In addition to the requirements stated in table A-III/6 of this Code, Parties are encouraged to take into account resolution A.702(17) concerning radio maintenance guidelines for the Global Maritime Distress and Safety System (GMDSS) within their training programmes.

Section B-III/7

Guidance regarding training and certification for electro-technical ratings

(No provisions)

#### CHAPTER IV

#### Guidance regarding radiocommunication and radio operators

#### Section B-IV/1

Guidance regarding the application of chapter IV

(No provisions)

#### Section B-IV/2

Guidance regarding training and certification of GMDSS radio operators

#### TRAINING RELATED TO THE FIRST-CLASS RADIOELECTRONIC CERTIFICATE

#### General

- The requirements of medical fitness, especially as to hearing, eyesight and speech, should be met by the candidate before training is commenced.
- The training should be relevant to the provisions of the STCW Convention, the provisions of the Radio Regulations annexed to the International Telecommunication Convention (Radio Regulations) and the provisions of the International Convention for the Safety of Life at Sea (SOLAS Convention) currently in force, with particular attention given to provisions for the global maritime distress and safety system (GMDSS). In developing training requirements, account should be taken of at least the knowledge and training given in paragraphs 3 to 14 hereunder.

#### Theory

- 3 Knowledge of the general principles and basic factors necessary for safe and efficient use of all sub-systems and equipment required in the GMDSS, sufficient to support the practical training provisions given in paragraph 13.
- 4 Knowledge of the use, operation and service areas of GMDSS sub-systems, including satellite system characteristics, navigational and meteorological warning systems and selection of appropriate communication circuits.
- 5 Knowledge of the principles of electricity and the theory of radio and electronics sufficient to meet the provisions given in paragraphs 6 to 10 below.
- Theoretical knowledge of GMDSS radiocommunication equipment, including narrow-band direct-printing telegraphy and radiotelephone transmitters and receivers, digital selective calling equipment, ship earth stations, emergency position-indicating radio beacons (EPIRBs), marine antenna systems, radio equipment for survival craft together with all auxiliary items, including power supplies, as well as general knowledge of the principles of other equipment generally used for radionavigation, with particular reference to maintaining the equipment in service.
- 7 Knowledge of factors that affect system reliability, availability, maintenance procedures and proper use of test equipment.
- 8 Knowledge of microprocessors and fault diagnosis in systems using microprocessors.
- 9 Knowledge of control systems in the GMDSS radio equipment, including testing and analysis.

10 Knowledge of the use of computer software for the GMDSS radio equipment and methods for correcting faults caused by loss of software control of the equipment.

# Regulations and documentation

### II Knowledge of:

- .1 the SOLAS Convention and the Radio Regulations, with particular emphasis on:
  - .1.1 distress, urgency and safety radiocommunications;
  - .1.2 avoiding harmful interference, particularly with distress and safety traffic; and
  - .1.3 prevention of unauthorized transmissions;
- .2 other documents relating to operational and communication procedures for distress, safety and public correspondence services, including charges, navigational warnings, and weather broadcasts in the Maritime Mobile Service and the Maritime Mobile Satellite Service; and
- .3 use of the International Code of Signals and the IMO Standard Marine Communication Phrases.

### Watchkeeping and procedures

- 12 Knowledge of and training in:
  - .1 communication procedures and discipline to prevent harmful interference in GMDSS sub-systems;
  - .2 procedures for using propagation-prediction information to establish optimum frequencies for communications;
  - .3 radiocommunication watchkeeping relevant to all GMDSS sub-systems, exchange of radiocommunication traffic, particularly concerning distress, urgency and safety procedures, and radio records;
  - .4 use of the international phonetic alphabet;
  - .5 monitoring a distress frequency while simultaneously monitoring or working on at least one other frequency;
  - .6 ship reporting systems and procedures;
  - .7 radiocommunication procedures of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual;
  - .8 radio medical systems and procedures; and
  - .9 causes of false distress alerts and means to avoid them.\*

See COM/Circ.127 - Guidelines for avoiding false distress alerts.

#### Practical

- 13 Practical training, supported by appropriate laboratory work, should be given in:
  - .1 correct and efficient operation of all GMDSS sub-systems and equipment under normal propagation conditions and under typical interference conditions;
  - .2 safe operation of all the GMDSS communication equipment and ancillary devices, including safety precautions;
  - .3 adequate and accurate keyboard skills for the satisfactory exchange of communications;
  - .4 operational techniques for:
    - .4.1 receiver and transmitter adjustment for the appropriate mode of operation, including digital selective calling and direct-printing telegraphy;
    - .4.2 antenna adjustment and realignment, as appropriate;
    - .4.3 use of radio life-saving appliances; and
    - .4.4 use of emergency position-indicating radio beacons (EPIRBs);
  - .5 antenna rigging, repair and maintenance, as appropriate;
  - .6 reading and understanding pictorial, logic and circuit diagrams;
  - .7 use and care of those tools and test instruments necessary to carry out at-sea electronic maintenance;
  - .8 manual soldering and desoldering techniques, including those involving semi-conductor devices and modern circuits, and the ability to distinguish whether the circuit is suitable to be manually soldered or desoldered;
  - .9 tracing and repair of faults to component level, where practicable, and to board/module level in other cases;
  - .10 recognition and correction of conditions contributing to the fault occurring;
  - .11 maintenance procedures, both preventive and corrective, for all GMDSS communication equipment and radionavigation equipment; and
  - .12 methods of alleviating electrical and electromagnetic interference such as bonding, shielding and bypassing.

#### Miscellaneous

- 14 Knowledge of and/or training in:
  - .1 the English language, both written and spoken, for the satisfactory exchange of communications relevant to the safety of life at sea;

- world geography, especially the principal shipping routes, services of rescue coordination centres (RCCs) and related communication routes;
- survival at sea, the operation of lifeboats, rescue boats, liferafts, buoyant apparatus and their equipment, with special reference to radio life-saving appliances;
- .4 fire prevention and fire fighting, with particular reference to the radio installation;
- .5 preventive measures for the safety of ship and personnel in connection with hazards related to radio equipment, including electrical, radiation, chemical and mechanical hazards;
- .6 first aid, including heart-respiration revival techniques; and
- .7 coordinated universal time (UTC), global time zones and the international date line.

# TRAINING RELATED TO THE SECOND-CLASS RADIOELECTRONIC CERTIFICATE

#### General

- The requirements of medical fitness, especially as to hearing, eyesight and speech, should be met by the candidate before training is commenced.
- The training should be relevant to the provisions of the STCW Convention and the SOLAS Convention currently in force, with particular attention given to provisions for the global maritime distress and safety system (GMDSS). In developing training requirements, account should be taken of at least the knowledge and training given in paragraphs 17 to 28 hereunder.

#### Theory

- 17 Knowledge of the general principles and basic factors necessary for safe and efficient use of all sub-systems and equipment required in the GMDSS, sufficient to support the practical training provisions given in paragraph 27 below.
- 18 Knowledge of the use, operation and service areas of GMDSS sub-systems, including satellite system characteristics, navigational and meteorological warning systems and selection of appropriate communication circuits.
- 19 Knowledge of the principles of electricity and the theory of radio and electronics sufficient to meet the provisions given in paragraphs 20 to 24 below.
- General theoretical knowledge of GMDSS radiocommunication equipment, including narrow-band direct-printing telegraphy and radiotelephone transmitters and receivers, digital selective calling equipment, ship earth stations, emergency position-indicating radio beacons (EPIRBs), marine antenna systems, radio equipment for survival craft together with all auxiliary items, including power supplies, as well as general knowledge of other equipment generally used for radionavigation, with particular reference to maintaining the equipment in service.
- 21 General knowledge of factors that affect system reliability, availability, maintenance procedures and proper use of test equipment.

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

- 22 General knowledge of microprocessors and fault diagnosis in systems using microprocessors.
- General knowledge of control systems in the GMDSS radio equipment, including testing and analysis.
- 24 Knowledge of the use of computer software for the GMDSS radio equipment and methods for correcting faults caused by loss of software control of the equipment.

#### Regulations and documentation

- 25 Knowledge of:
  - the SOLAS Convention and the Radio Regulations, with particular emphasis on:
    - .1.1 distress, urgency and safety radiocommunications;
    - .1.2 avoiding harmful interference, particularly with distress and safety traffic; and
    - .1.3 the prevention of unauthorized transmissions;
  - .2 other documents relating to operational and communication procedures for distress, safety and public correspondence services, including charges, navigational warnings, and weather broadcasts in the Maritime Mobile Service and the Maritime Mobile Satellite Service; and
  - .3 the use of the International Code of Signals and the IMO Standard Marine Communication Phrases.

#### Watchkeeping and procedures

- 26 Training should be given in:
  - .1 communication procedures and discipline to prevent harmful interference in GMDSS sub-systems;
  - .2 procedures for using propagation-prediction information to establish optimum frequencies for communications;
  - .3 radiocommunication watchkeeping relevant to all GMDSS sub-systems, exchange of radiocommunication traffic, particularly concerning distress, urgency and safety procedures, and radio records;
  - .4 use of the international phonetic alphabet;
  - .5 monitoring a distress frequency while simultaneously monitoring or working on at least one other frequency;
  - .6 ship reporting systems and procedures;
  - .7 radiocommunication procedures of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual;

- .8 radio medical systems and procedures; and
- .9 causes of false distress alerts and means to avoid them.

#### Practical

- 27 Practical training, supported by appropriate laboratory work, should be given in:
  - .1 correct and efficient operation of all GMDSS sub-systems and equipment under normal propagation conditions and under typical interference conditions;
  - .2 safe operation of all the GMDSS communication equipment and ancillary devices, including safety precautions;
  - .3 adequate and accurate keyboard skills for the satisfactory exchange of communications;
  - .4 operational techniques for:
    - .4.1 receiver and transmitter adjustment for the appropriate mode of operation, including digital selective calling and direct-printing telegraphy;
    - .4.2 antenna adjustment and realignment, as appropriate;
    - .4.3 use of radio life-saving appliances; and
    - .4.4 use of emergency position-indicating radio beacons (EPIRBs);
  - .5 antenna rigging, repair and maintenance, as appropriate;
  - .6 reading and understanding pictorial, logic and module interconnection diagrams;
  - .7 use and care of those tools and test instruments necessary to carry out at-sea electronic maintenance at the level of replacement of a unit or module;
  - .8 basic manual soldering and desoldering techniques and their limitations;
  - .9 tracing and repair of faults to board/module level;
  - .10 recognition and correction of conditions contributing to the fault occurring;
  - .11 basic maintenance procedures, both preventive and corrective, for all the GMDSS communication equipment and radionavigation equipment; and
  - .12 methods of alleviating electrical and electromagnetic interference, such as bonding, shielding and bypassing.

See COM/Circ.127 and IMO Assembly resolution A.814 (19) — Guidelines for avoiding false distress alerts.

#### Miscellaneous

- 28 Knowledge of, and/or training in:
  - .I the English language, both written and spoken, for the satisfactory exchange of communications relevant to the safety of life at sea;
  - .2 world geography, especially the principal shipping routes, services of rescue coordination centres (RCCs) and related communication routes;
  - 3 survival at sea, the operation of lifeboats, rescue boats, liferafts, buoyant apparatus and their equipment, with special reference to radio life-saving appliances;
  - .4 fire prevention and fire fighting, with particular reference to the radio installation;
  - .5 preventive measures for the safety of ship and personnel in connection with hazards related to radio equipment, including electrical, radiation, chemical and mechanical hazards;
  - .6 first aid, including heart-respiration revival techniques; and
  - .7 coordinated universal time (UTC), global time zones and the international date line.

#### TRAINING RELATED TO THE GENERAL OPERATOR'S CERTIFICATE

#### General

- The requirements of medical fitness, especially as to hearing, eyesight and speech, should be met by the candidate before training is commenced.
- The training should be relevant to the provisions of the STCW Convention, the Radio Regulations and the SOLAS Convention currently in force, with particular attention given to provisions for the global maritime distress and safety system (GMDSS). In developing training requirements, account should be taken of at least the knowledge and training given in paragraphs 31 to 36 hereunder.

#### Theory

- 31 Knowledge of the general principles and basic factors necessary for safe and efficient use of all sub-systems and equipment required in the GMDSS sufficient to support the practical training provisions given in paragraph 35 below.
- 32 Knowledge of the use, operation and service areas of GMDSS sub-systems, including satellite system characteristics, navigational and meteorological warning systems and selection of appropriate communication circuits.

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

### Regulations and documentation

### 33 Knowledge of:

- .1 the SOLAS Convention and the Radio Regulations, with particular emphasis on:
  - 1.1 distress, urgency and safety radiocommunications;
  - .1.2 avoiding harmful interference, particularly with distress and safety traffic; and
  - .1.3 prevention of unauthorized transmissions;
- .2 other documents relating to operational and communication procedures for distress, safety and public correspondence services, including charges, navigational warnings, and weather broadcasts in the Maritime Mobile Service and the Maritime Mobile Satellite Service; and
- .3 use of the International Code of Signals and the IMO Standard Marine Communication Phrases.

# Watchkeeping and procedures

- 34 Training should be given in:
  - .1 communication procedures and discipline to prevent harmful interference in GMDSS sub-systems;
  - .2 procedures for using propagation-prediction information to establish optimum frequencies for communications;
  - radiocommunication watchkeeping relevant to all GMDSS sub-systems, exchange of radiocommunication traffic, particularly concerning distress, urgency and safety procedures, and radio records;
  - .4 use of the international phonetic alphabet;
  - .5 monitoring a distress frequency while simultaneously monitoring or working on at least one other frequency;
  - .6 ship reporting systems and procedures;
  - .7 radiocommunication procedures of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual;
  - .8 radio medical systems and procedures; and
  - .9 causes of false distress alerts and means to avoid them.\*

See COM/Circ.127 and IMO Assembly resolution A.814 (19) - Guidelines for avoiding false distress alerts.

#### Practical

- 35 Practical training should be given in:
  - .1 correct and efficient operation of all GMDSS sub-systems and equipment under normal propagation conditions and under typical interference conditions;
  - .2 safe operation of all the GMDSS communications equipment and ancillary devices, including safety precautions;
  - .3 accurate and adequate keyboard skills for the satisfactory exchange of communications; and
  - .4 operational techniques for:
    - .4.1 receiver and transmitter adjustment for the appropriate mode of operation, including digital selective calling and direct-printing telegraphy;
    - .4.2 antenna adjustment and realignment as appropriate;
    - .4.3 use of radio life-saving appliances; and
    - .4.4 use of emergency position-indicating radio beacons (EPIRBs).

#### Miscellaneous

- 36 Knowledge of, and/or training in:
  - .1 the English language, both written and spoken, for the satisfactory exchange of communications relevant to the safety of life at sea;
  - .2 world geography, especially the principal shipping routes, services of rescue coordination centres (RCCs) and related communication routes;
  - 3 survival at sea, the operation of lifeboats, rescue boats, liferafts, buoyant apparatus and their equipment, with special reference to radio life-saving appliances;
  - .4 fire prevention and fire-fighting, with particular reference to the radio installation;
  - .5 preventive measures for the safety of ship and personnel in connection with hazards related to radio equipment, including electrical, radiation, chemical and mechanical hazards:
  - .6 first aid, including heart-respiration revival techniques; and
  - .7 coordinated universal time (UTC), global time zones and the international date line.

# TRAINING RELATED TO THE RESTRICTED OPERATOR'S CERTIFICATE

#### General

- 37 The requirements of medical fitness, especially as to hearing, eyesight and speech, should be met by the candidate before training is commenced.
- The training should be relevant to the provisions of the STCW Convention, the Radio Regulations and the SOLAS Convention currently in force, with particular attention given to provisions for the global maritime distress and safety system (GMDSS). In developing training guidance, account should be taken of at least the knowledge and training given in paragraphs 39 to 44 hereunder.

#### Theory

- Knowledge of the general principles and basic factors, including VHF range limitation and antenna height effect necessary for safe and efficient use of all sub-systems and equipment required in GMDSS in sea area A1, sufficient to support the training given in paragraph 43 below.
- Knowledge of the use, operation and service areas of GMDSS sea area A1 sub-systems, e.g., navigational and meteorological warning systems and the appropriate communication circuits.

# Regulations and documentation

- 41 Knowledge of:
  - .1 those parts of the SOLAS Convention and the Radio Regulations relevant to sea area A1, with particular emphasis on:
    - .1.1 distress, urgency and safety radiocommunications;
    - .1.2 avoiding harmful interference, particularly with distress and safety traffic; and
    - .1.3 prevention of unauthorized transmissions;
  - other documents relating to operational and communication procedures for distress, safety and public correspondence services, including charges, navigational warnings and weather broadcasts in the Maritime Mobile Service in sea area A1; and
  - .3 use of the International Code of Signals and the IMO Standard Marine Communication Phrases.

#### Watchkeeping and procedures

- 42 Training should be given in:
  - .1 communication procedures and discipline to prevent harmful interference in GMDSS sub-systems used in sea area A1;

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

- .2 VHF communication procedures for:
  - .2.1 radiocommunication watchkeeping, exchange of radiocommunication traffic, particularly concerning distress, urgency and safety procedures, and radio records;
  - .2.2 monitoring a distress frequency while simultaneously monitoring or working on at least one other frequency; and
  - .2.3 the digital selective calling system;
- .3 use of the international phonetic alphabet;
- .4 ship reporting systems and procedures;
- .5 VHF radiocommunication procedures of the International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual;
- .6 radio medical systems and procedures; and
- .7 causes of false distress alerts and means to avoid them.

#### Practical

- 43 Practical training should be given in:
  - .1 correct and efficient operation of the GMDSS sub-systems and equipment prescribed for ships operating in sea area A1 under normal propagation conditions and under typical interference conditions;
  - .2 safe operation of relevant GMDSS communication equipment and ancillary devices, including safety precautions; and
  - .3 operational techniques for use of:
    - .3.1 VHF, including channel, squelch, and mode adjustment, as appropriate;
    - .3.2 radio life-saving appliances;
    - .3.3 emergency position-indicating radio beacons (EPIRBs); and
    - .3.4 NAVTEX receivers.

#### Miscellaneous

- 44 Knowledge of, and/or training in:
  - .1 the English language, both written and spoken, for the satisfactory exchange of communications relevant to the safety of life at sea;
  - .2 services of rescue coordination centres (RCCs) and related communication routes;

See COM/Circ.127 and IMO Assembly resolution A.814 (19) – Guidelines for avoiding false distress alerts.

- .3 survival at sea, the operation of lifeboats, rescue boats, liferafts, buoyant apparatus and their equipment, with special reference to radio life-saving appliances;
- .4 fire prevention and fire fighting, with particular reference to the radio installation;
- .5 preventive measures for the safety of ship and personnel in connection with hazards related to radio equipment, including electrical, radiation, chemical and mechanical hazards; and
- .6 first aid, including heart-respiration revival techniques.

# TRAINING RELATED TO MAINTENANCE OF GMDSS INSTALLATIONS ON BOARD SHIPS

#### General

- Reference is made to the maintenance requirements of SOLAS Convention regulation IV/15, and to IMO resolution A.702(17) on Radio maintenance guidelines for the GMDSS related to sea areas A3 and A4, which includes in its annex the following provision:
  - "4.2 The person designated to perform functions for at-sea electronic maintenance should either hold an appropriate certificate as specified by the Radio Regulations, as required, or have equivalent at-sea electronic maintenance qualifications, as may be approved by the Administration, taking into account the recommendations of the Organization on the training of such personnel."
- The following guidance on equivalent electronic maintenance qualifications is provided for use by Administrations as appropriate.
- 47 Training as recommended below does not qualify any person to be an operator of GMDSS radio equipment who does not hold an appropriate Radio Operator's Certificate.

# Maintenance training equivalent to the First-Class Radioelectronic Certificate

- 48 In determining training equivalent to the elements of the listed First-Class Radioelectronic Certificate:
  - .1 the theory content should cover at least the subjects given in paragraphs 3 to 10;
  - .2 the practical content should cover at least the subjects given in paragraph 13; and
  - .3 the miscellaneous knowledge included should cover at least the subjects given in paragraph 14.

# Maintenance training equivalent to the Second-Class Radioelectronic Certificate

- 49 In determining training equivalent to the maintenance elements of the Second-Class Radioelectronic Certificate:
  - .1 the theory content should cover at least the subjects given in paragraphs 17 to 24;
  - .2 the practical content should cover at least the subjects given in paragraph 27; and
  - .3 the miscellaneous knowledge included should cover at least the subjects given in paragraph 28.

#### CHAPTER V

Guidance regarding special training requirements for personnel on certain types of ships

#### Section B-V/1

Guidance regarding the training and qualifications of tanker personnel

#### Person with immediate responsibility

The term "person with immediate responsibility" as used in paragraphs 3 and 5 of regulation V/1-1 and paragraph 3 of regulation V/1-2 means a person being in a decision-making capacity with respect to loading, discharging, care in transit, handling of cargo, tank cleaning or other cargo-related operations.

#### FAMILIARIZATION TRAINING FOR ALL TANKER PERSONNEL

All tanker personnel should undergo familiarization training on board and, where appropriate, ashore before being assigned to shipboard duties, which should be given by qualified personnel experienced in the handling and characteristics of oil, chemical or liquefied gas cargoes, as appropriate, and the safety procedures involved. The training should at least cover the matters set out in paragraphs 3 to 8 below.

#### Regulations

Knowledge of the ship's rules and regulations governing the safety of personnel on board a tanker in port and at sea.

### Health hazards and precautions to be taken

4 Dangers of skin contact; inhalation and accidental swallowing of cargo; the harmful properties of the cargoes carried, personnel accidents and associated first aid; lists of do's and don'ts.

#### Fire prevention and fire fighting

5 Control of smoking and cooking restrictions; sources of ignition; fire and explosion prevention; methods of fire fighting; portable fire extinguishers and fixed installations.

#### Pollution prevention

6 Procedures to be followed to prevent air and water pollution and measures which will be taken in the event of spillage.

#### Safety equipment and its use

7 The proper use of protective clothing and equipment, resuscitators, escape and rescue equipment.

#### **Emergency procedures**

8 Familiarization with the emergency plan procedures.

### PROOF OF QUALIFICATION

The master of every oil, chemical and liquefied gas tanker should ensure that the officer or the person primarily responsible for the cargo possesses the appropriate certificate, issued or endorsed or validated as required by regulation V/1-1, paragraph 3; regulation V/1-1, paragraph 5 or regulation V/1-2, paragraph 3, as appropriate, and has had adequate recent practical experience on board an appropriate type of tanker to permit that officer or person to safely perform the duties assigned.

# GUIDANCE REGARDING APPROVED ONBOARD TRAINING

#### General

- The purpose of qualifying shipboard service is to provide training and knowledge for the safe carriage of specific tanker cargoes.
- To satisfy the experience appropriate to their duties on the type of tanker on which they serve referred to in regulation V/1-1, paragraph 4.2.2, regulation V/1-1, paragraph 6.2.2 and regulation V/1-2, paragraph 4.2.2, onboard training should:
  - .1 emphasize practical "hands on experience" and be related to the employment of the seafarer, i.e. the training of deck and engineering departments may be different;
  - .2 be under the supervision of personnel qualified and experienced in the handling, characteristics and safety procedures of the cargoes being carried by the vessel;
  - be on board the tanker carrying products relative to the tanker Certificate of Proficiency/Endorsement being sought and should be such that the specialist equipment is brought into operation but may be on a ballast passage between cargoes for part of that period;
  - .4 take part in at least three loading and discharge operations; and\*
  - .5 at least cover the matters set out in "Onboard training criteria" in paragraph 19.
- 12 The onboard training programme must in no way affect the safe running or the seaworthiness of the vessel.

# Onboard training programme

The trainee should be carried in a supernumerary capacity (i.e. the trainee will have no other duties than that of undertaking the training programme and emergency duties).

A loading or discharging operation is considered to be the loading or discharge of more than 60% of the total cargo tank capacity of the vessel. Loading/discharges of less than this quantity may be summed together to be equivalent to this quantity.

- The programme of onboard training should be managed and coordinated by the company which manages the ship on which the seagoing service is to be performed and be a vessel nominated by the company as a training vessel.
- At all times, the trainee should be aware of two identifiable individuals who are immediately responsible for the management of the programme of onboard training. The first of these is a qualified seagoing officer, referred to as the "shipboard training officer", who, under the authority of the master, should organize and supervise the programme of training. The second should be a person nominated by the company, referred to as the "company training officer", who should have an overall responsibility for the training programme and for coordination with training organizations.
- The trainee should be provided with an approved training record book to enable a comprehensive record of practical training and experience at sea to be maintained. The approved training record book should be laid out in such a way that it can provide detailed information about the tasks and duties which should be undertaken and the progress towards their completion. Duly completed and countersigned by the master, the approved record book will provide unique evidence that a structured programme of onboard training has been completed leading towards the issue of a relevant Certificate in Advanced Training for Tanker Cargo Operations.
- During the approved onboard training programme the trainee should be instructed in the loading, discharging, care in transit, handling of cargo, tank cleaning or other cargo-related operations of the tanker to ensure that the experience gained is at least equal to that which would be obtained in three months' normal service.
- If the three-loading and three-unloading criteria cannot be achieved within the one-month onboard training period, then the period of onboard training should be extended until these criteria have been satisfactorily achieved.

# Onboard training criteria

19 The onboard training should at least provide knowledge and experience, relevant to the applicable tanker type, of the following:

#### .1 Safety

#### .1.1 All tanker types

- .1 Ship's safety-management system
- .2 Cargo-specific fire-fighting equipment and procedures
- .3 Cargo-specific first-aid procedures, including the Medical First Aid Guide for Use in Accidents involving Dangerous Goods (MFAG)
- .4 Ship-/cargo-specific hazards, including smoking regulations, oxygen-depleted atmospheres, cargo hydrocarbon narcosis and toxicity
- .5 Risk assessment systems

A nominated training vessel is a trading vessel named by the company that is suitable for the purpose of this guidance, as applicable.

- .6 Permit to work, including hot work and enclosed spaces entry procedures
- .7 Use of personal protective equipment

# .1.2 Additional for liquefied gas tankers

.1 Dangers and precautions related to handling and storage of cargoes at cryogenic temperatures

# .2 Construction, cargo, cargo tanks and pipelines

### .2.1 All tanker types

- .1 Hull/tank construction and limitations
- .2 Cargo connections
- .3 Properties and hazards associated with the types of cargo being carried, including use of Material Safety Data Sheets
- .4 The risks that cargo operations (such as purging/gas-freeing/tank cleaning) may have on the accommodation ventilation systems and actions to mitigate these risks
- .5 Configuration of cargo and ballast system
- .6 Pumps and associated equipment
- .7 Specialist equipment associated with the cargo operations
- .8 Particulars of the tanker's construction and how this affects the cargo operations

# .2.2 Additional for liquefied gas tankers

- .1 Use of segregation, separation and airlocks to maintain gas-safe areas
- .2 Cargo tank, inter-barrier, insulation spaces, and pipeline relief valves and vapour venting systems
- .3 Cargo vapour compressors and associated equipment

#### .3 Trim and stability •

#### .3.1 All tanker types

- .1 Tanker's stability information and calculating equipment
- .2 Importance of maintaining stress levels within acceptable limits
- .3 Dangers of free surface effect and "sloshing" effect

# .4 Cargo operations

# .4.1 All tanker types

- .1 Pre-planning of loading/in-transit care, discharge/ballast operations
- .2 Record keeping
- .3 Start up/stopping procedures, including emergency shutdown
- .4 Attention required for mooring arrangements during cargo operations
- .5 Purging and inerting requirements and associated hazards
- .6 Loading cargo, including topping-off operations

- .7 Discharging cargo, including draining and stripping operations
- .8 Monitoring of cargo during loading/discharging operations, including sampling where applicable
- .9 Tank gauging and alarm systems
- .10 Dangers from electrostatic discharge and its prevention
- .11 Ballasting and deballasting operations
- .12 Maintenance requirements, including coating inspections

### .4.2 Additional for chemical tankers

- .1 Polymerization, cargo compatibility, tank coating compatibility and other reactions
- .2 Functions of inhibitors and catalysts
- .3 Vapour/gas dispersion

### .4.3 Additional for liquefied gas tankers

- .1 Polymerization, cargo compatibility, tank coating compatibility and other reactions
- .2 Functions of inhibitors and catalysts
- .3 Causes of backpressure and pressure surge effects
- .4 Use of boil-off gas as a fuel
- .5 Vapour/gas dispersion
- .6 Purging and cool-down operations
- .7 Operation and maintenance of re-liquefaction equipment
- .8 Understanding and use of the custody transfer system

#### .4.4 Additional for oil tankers

.1 Crude oil washing systems

#### .5 Tank washing/cleaning

#### .5.1 All tanker types

- .1 Tank cleaning systems and equipment fitted on the tanker
- .2 Pre-planning of tank washing/cleaning operations
- .3 Tank washing procedures, including purging and inerting
- .4 Control of slops/waste product
- .5 Electro-static hazards
- .6 Cleanliness requirements
- .7 Maintenance requirements

#### .5.2 Additional for chemical tankers

- .1 Removal of inhibitors and residues
- .2 Use of absorption, cleaning agents and detergents

#### .5.3 Additional for liquefied gas tankers

.1 Hot-gassing/boil-off of liquid residues and regassification process

#### Inert gas systems .6

#### All tanker types .6.1

Inerting system(s) and equipment fitted to the tanker .1

Hazards associated with inerting of spaces, with particular reference .2 to safe entry into tanks

Purging, maintaining inert atmosphere and gas-freeing operations .3

Maintenance requirements .4

#### Pollution prevention and control .7

#### All tanker types .7.1

International, flag State and company regulations, documentation .1

Operation of the tanker's pollution-prevention systems and .2

equipment, including discharge monitoring

Operation of the tanker's pollution-containment equipment .3

#### Gas-detection equipment and instruments 8,

#### All tanker types .8.1

Use and calibration of personal, portable and fixed gas analysers, .1 with particular reference to oxygen and hydrocarbon monitoring equipment

Operation, maintenance and limitation of cargo tank level .2

measuring, level alarm and temperature-measuring systems

#### Additional for liquefied gas tankers .8.2

Operation and maintenance of hull temperature measurement .1

#### Publications .9

#### All tanker types .9.1

International, flag State and company publications relevant to the .1 operation of the tanker, including SOLAS, MARPOL and applicable guidance manuals

Operating and maintenance manuals specific to the equipment on .2

Established industrial standards and code of safe working practice .3 (e.g., ICS, OCIMF, SIGTTO)

### Section B-V/1-1

Guidance regarding training and qualifications of masters, officers and ratings on oil and chemical tankers

### OIL TANKER TRAINING

- The training required by paragraphs 2.2 and 4.3 of regulation V/1-1 in respect of oil tankers should be set out in a training plan which clearly expresses, for all parties involved, the objectives of the training. Training may be given on board or ashore, where appropriate. It should be supplemented by practical instruction on board and, where appropriate, in a suitable shore-based installation. All training and instruction should be given by properly qualified and suitably experienced personnel\*.
- As much use as possible should be made of shipboard operation and equipment manuals, films and suitable visual aids, and the opportunity should be taken to introduce discussion of the part to be played by the safety organization on board ship and the role of safety officers and safety committees.

### CHEMICAL TANKER TRAINING

- The training required by paragraphs 2.2 and 6.3 of regulation V/1-1 in respect of chemical tankers should be set out in a training plan which clearly expresses, for all parties involved, the objectives of the training. Training may be given on board or ashore, where appropriate. It should be supplemented by practical instruction on board and, where appropriate, in a suitable shore-based installation. All training and instruction should be given by properly qualified and suitably experienced personnel.
- As much use as possible should be made of shipboard operation and equipment manuals, films and suitable visual aids, and the opportunity should be taken to introduce discussion of the part to be played by the safety organization on board ship and the role of safety officers and safety committees.

### Section B-V/1-2

Guidance regarding training and qualifications of masters, officers and ratings on liquefied gastankers

- The training required by paragraphs 2.2 and 4.3 of regulation V/1-2 in respect of liquefied gas tankers should be set out in a training plan which clearly expresses, for all parties involved, the objectives of the training. Training may be given on board or ashore, where appropriate. It should be supplemented by practical instruction on board and, where appropriate, in a suitable shore-based installation. All training and instruction should be given by properly qualified and suitably experienced personnel.
- As much use as possible should be made of shipboard operation and equipment manuals, films and suitable visual aids, and the opportunity should be taken to introduce discussion of the part to be played by the safety organization on board ship and the role of safety officers and safety committees.

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

### Section B-V/2

Guidance regarding training of seafarers on passenger ships

### ENHANCED FIRE FIGHTING

For officers and crew on passenger ships, additional training should be provided highlighting the difficulties of fighting fires, including access to confined spaces and prevention of the spread of fire to adjoining spaces.

### DAMAGE CONTROL

In developing standards of competency given in sections A-II/1, A-II/2 and A-III/2 to achieve the necessary level of theoretical knowledge, understanding and proficiency in damage control and watertight integrity, companies and training institutions should take into account the minimum knowledge, understanding and proficiency for damage control and watertight integrity as given below:

### Competence

Minimize the risk of flooding and maintain a state of readiness to respond to emergency situations involving damage to the watertight integrity of the ship.

# Knowledge, understanding and proficiency

Shipboard damage control plans and organization.

Damage control systems, equipment (lockers) and emergency escape routes

The key elements in maintaining stability and watertight integrity.

Importance of securing flooding and maintaining watertight boundaries.

Actions to be taken aboard a ship in the event of an explosion, grounding, collision, or fire

Damage control techniques consistent with equipment found on board including the ship bilge systems and pumps.

### Section B-V/a

Guidance regarding additional training for masters and chief mates of large ships and ships with unusual manoeuvring characteristics

It is important that masters and chief mates should have had relevant experience and training before assuming the duties of master or chief mate of large ships or ships having unusual manoeuvring and handling characteristics significantly different from those in which they have recently served. Such characteristics will generally be found in ships which are of considerable deadweight or length or of special design or of high speed.

Note there are no corresponding regulations in the Convention or sections in part A of the Code for sections B-V/a, B-V/b, B-V/c, B-V/d, B-V/e, B-V/f and B-V/g.

- z ritor to their appointment to such a snip, masters and chief mates should:
  - .1 be informed of the ship's handling characteristics by the company, particularly in relation to the knowledge, understanding and proficiency listed under ship manoeuvring and handling in column 2 of table A-II/2 Specification of the minimum standard of competence for masters and chief mates on ships of 500 gross tonnage or more; and
  - .2 be made thoroughly familiar with the use of all navigational and manoeuvring aids fitted in the ship concerned, including their capabilities and limitations.
- Before initially assuming command of one of the ships referred to above, the prospective master should have sufficient and appropriate general experience as master or chief mate, and either:
  - .1 have sufficient and appropriate experience manoeuvring the same ship under supervision or in manoeuvring a ship having similar manoeuvring characteristics; or
  - .2 have attended an approved ship handling simulator course on an installation capable of simulating the manoeuvring characteristics of such a ship.
- The additional training and qualifications of masters and chief mates of dynamically supported and high-speed craft should be in accordance with the relevant guidelines of the IMO Code of Safety for Dynamically Supported Craft and the IMO International Codes of Safety for High-Speed Craft (1994 HSC Code and 2000 HSC Code), as appropriate.

# Section B-V/b\*\*

Guidance regarding training of officers and ratings responsible for cargo handling on ships carrying dangerous and hazardous substances in solid form in bulk

Training should be divided into two parts, a general part on the principles involved and a part on the application of such principles to ship operation. All training and instruction should be given by properly qualified and suitably experienced personnel and cover at least the subjects given in paragraphs 2 to 14 hereunder.

### PRINCIPLES

### Characteristics and properties

2 The important physical characteristics and chemical properties of dangerous and hazardous substances, sufficient to give a basic understanding of the intrinsic hazards and risks involved.

# Classification of materials possessing chemical hazards

3 IMO dangerous goods classes 4 to 9 and the hazards associated with each class; and materials hazardous only in bulk (MHB) outlined in the International Maritime Solid Bulk Cargoes (IMSBC) Code.

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

Note there are no corresponding regulations in the Convention or sections in part A of the Code for sections B-V/a, B-V/b, B-V/c, B-V/d, B-V/e, B-V/f and B-V/g.

#### Health hazards

4 Dangers from skin contact, inhalation, ingestion and radiation.

# Conventions, regulations and recommendations

- 5 General familiarization with the relevant requirements of chapters II-2 and VII of the 1974 SOLAS Convention, as amended.
- 6 General use of and familiarization with the International Maritime Solid Bulk Cargoes (IMSBC) Code, with particular reference to:
  - safety of personnel, including safety equipment, measuring instruments, their use and practical application and interpretation of results;
  - .2 hazards from cargoes which have a tendency to shift; and
  - .3 materials possessing chemical hazards.

### SHIPBOARD APPLICATION

- Class 4.1 Flammable solids
- Class 4.2 Substances liable to spontaneous combustion
- Class 4.3 Substances which, in contact with water, emit flammable gases
- 7 Carriage, stowage and control of temperature to prevent decomposition and possible explosion; stowage categories; general stowage precautions, including those applicable to self-reactive and related substances; segregation requirements to prevent heating and ignition; the emission of poisonous or flammable gases and the formation of explosive mixtures.

# Class 5.1 - Oxidizing substances

8 Carriage, stowage and control of temperature to prevent decomposition and possible explosion; stowage categories; general stowage precautions and segregation requirements to ensure separation from combustible material, from acids and heat sources to prevent fire, explosion and the formation of toxic gases.

# Class 6.1 - Toxic substances

9 Contamination of foodstuffs, working areas and living accommodation and ventilation.

### Class 7 - Radioactive material

Transport index; types of ores and concentrates; stowage and segregation from persons, undeveloped photographic film and plates and foodstuffs; stowage categories; general stowage requirements; special stowage requirements; segregation requirements and separation distances; segregation from other dangerous goods.

### Class 8 - Corrosive substances

11 Dangers from wetted substances.

# Class 9 - Miscellaneous dangerous substances and articles

Examples and associated hazards; the hazards of materials hazardous only in bulk (IMSBC Code); general and specific stowage precautions; working and transport precautions; segregation requirements.

# Safety precautions and emergency procedures

Electrical safety in cargo spaces; precautions to be taken for entry into enclosed spaces that may contain oxygen-depleted, poisonous or flammable atmospheres; the possible effects of fire in shipments of substances of each class; use of the Emergency Response Procedures for Ships Carrying Dangerous Goods; emergency plans and procedures to be followed in case of incidents involving dangerous and hazardous substances and the use of individual entries in the International Maritime Solid Bulk Cargoes (IMSBC) Code, as appropriate, in this respect.

#### Medical first aid

The IMO Medical First Aid Guide for Use in Accidents Involving Dangerous Goods (MFAG) and its use and application in association with other guides and medical advice by radio.

### Section B-V/c\*

- Guidance regarding training of officers and ratings responsible for cargo handling on ships carrying dangerous and hazardous substances in packaged form
  - Training should be divided into two parts, a general part on the principles involved and a part on the application of such principles to ship operation. All training and instruction should be given by properly qualified and suitably experienced personnel and cover at least the subjects given in paragraphs 2 to 19 hereunder.

### PRINCIPLES

### Characteristics and properties

2 The important physical characteristics and chemical properties of dangerous and hazardous substances, sufficient to give a basic understanding of the intrinsic hazards and risks involved.

# Classification of dangerous and hazardous substances and materials possessing chemical hazards

3 IMO dangerous goods classes 1 to 9 and the hazards associated with each class.

#### Health hazards

4 Dangers from skin contact, inhalation, ingestion and radiation.

Note there are no corresponding regulations in the Convention or sections in part A of the Code for sections B-V/a, B-V/b, B-V/c, B-V/d, B-V/e, B-V/f and B-V/g.

# Conventions, regulations and recommendations

General familiarization with the relevant requirements of chapters II-2 and VII of the 1974 SOLAS Convention and of Annex III of MARPOL 73/78, including its implementation through the IMDG Code.

# Use of and familiarization with the International Maritime Dangerous Goods (IMDG) Code

- 6 General knowledge of the requirements of the IMDG Code concerning declaration, documentation, packing, labelling and placarding; freight container and vehicle packing; portable tanks, tank containers and road tank vehicles, and other transport units used for dangerous substances.
- 7 Knowledge of identification, marking and labelling for stowage, securing, separation and segregation in different ship types mentioned in the IMDG Code.
- 8 Safety of personnel, including safety equipment, measuring instruments, their use and practical application and the interpretation of results.

### SHIPBOARD APPLICATION

### Class 1 - Explosives

The six hazard divisions and 13 compatibility groups; packagings and magazines used for carriage of explosives; structural serviceability of freight containers and vehicles; stowage provisions, including specific arrangements for on-deck and under-deck stowage; segregation from dangerous goods of other classes within class 1 and from non-dangerous goods; transport and stowage on passenger ships; suitability of cargo spaces; security precautions; precautions to be taken during loading and unloading.

# Class 2 - Gases (compressed, liquefied, or dissolved under pressure), flammable, non-flammable, non-toxic and toxic

Types of pressure vessels and portable tanks, including relief and closing devices used; stowage categories; general stowage precautions, including those for flammable and poisonous gases and gases which are marine pollutants.

### Class 3 - Flammable liquids

Packagings, tank containers, portable tanks and road tank vehicles; stowage categories, including the specific requirements for plastics receptacles; general stowage precautions, including those for marine pollutants; segregation requirements; precautions to be taken when carrying flammable liquids at elevated temperatures.

Class 4.1 — Flammable solids

Class 4.2 - Substances liable to spontaneous combustion

Class 4.3 - Substances which, in contact with water, emit flammable gases

Types of packagings; carriage and stowage under controlled temperatures to prevent decomposition and possible explosion; stowage categories; general stowage precautions, including those applicable to self-reactive and related substances, desensitized explosives and marine pollutants; segregation requirements to prevent heating and ignition, the emission of poisonous or flammable gases and the formation of explosive mixtures.

- Class 5.1 Oxidizing substances Class 5.2 - Organic peroxides
- Types of packagings; carriage and stowage under controlled temperatures to prevent decomposition and possible explosion; stowage categories; general stowage precautions, including those applicable to marine pollutants; segregation requirements to ensure separation from combustible material, from acids and heat sources to prevent fire, explosion and the formation of toxic gases; precautions to minimize friction and impact which can initiate decomposition.

Class 6.1 — Toxic substances

Class 6.2 — Infectious substances

Types of packagings; stowage categories; general stowage precautions, including those applicable to toxic, flammable liquids and marine pollutants; segregation requirements, especially considering that the characteristic common to these substances is their ability to cause death or serious injury to human health; decontamination measures in the event of spillage.

### Class 7 - Radioactive material

Types of packagings; transport index in relation to stowage and segregation; stowage and segregation from persons, undeveloped photographic film and plates and foodstuffs; stowage categories; general stowage requirements; segregation requirements and separation distances; segregation from other dangerous goods.

### Class 8 - Corrosive substances

Types of packagings; stowage categories; general stowage precautions, including those applicable to corrosive, flammable liquids and marine pollutants; segregation requirements, especially considering that the characteristic common to these substances is their ability to cause severe damage to living tissue.

### Class 9 - Miscellaneous dangerous substances and articles

17 Examples of hazards, including marine pollution.

# Safety precautions and emergency procedures

Electrical safety in cargo spaces; precautions to be taken for entry into enclosed spaces that may contain oxygen-depleted, poisonous or flammable atmospheres; the possible effects of spillage or fire in shipments of substances of each class; consideration of events on deck or below deck; use of the IMO Emergency Response Procedures for Ships Carrying Dangerous Goods; emergency plans and procedures to be followed in case of incidents involving dangerous substances.

### Medical first aid

The IMO Medical First Aid Guide for Use in Accidents Involving Dangerous Goods (MFAG) and its use and application in association with other guides and medical advice by radio.

### Section B-V/d\*

Guidance on application of the provisions of the STCW Convention to mobile offshore units (MOUs)

- 1 The provisions of the STCW Convention apply to the maritime personnel of self-propelled MOUs proceeding on voyages.
- The provisions of the STCW Convention do not apply to non-self-propelled MOUs or to MOUs on station.
- When considering appropriate standards of training and certification when an MOU is on station, the country of registry should take account of relevant IMO recommendations. In particular, all maritime crew members on self-propelled MOUs and, where required, on other units should meet the requirements of the STCW Convention, as amended.
- 4 Self-propelled MOUs proceeding on international voyages are required to carry safe manning documents.
- MOUs on station are subject to the national legislation of the coastal State in whose Exclusive Economic Zone (EEZ) they are operating. Such coastal States should also take account of relevant IMO recommendations and should not prescribe higher standards for MOUs registered in other countries than the standards applied to MOUs registered in that coastal State.
- All special personnel employed on board MOUs (whether or not self-propelled) should be provided with appropriate familiarization and basic training in accordance with relevant IMO recommendations.

### Section B-V/e\*

Guidance regarding training and qualifications of masters and officers in charge of a navigational watch on board offshore supply vessels

- It is important that masters and officers involved in offshore supply operations should have relevant experience or training before assuming their duties on offshore supply vessels. The focus should be on onboard operational experience or a combination of operational experience and simulator training.
- 2 Masters and officers should understand the unique manoeuvring and handling characteristics common to offshore supply vessels.
- 3 Prior to performing offshore supply operations, the master and officers should:
  - .1 have knowledge of the offshore industry and the terms used in the various operations;
  - .2 understand the importance of maintaining a safe working distance at all times when working in an offshore location/installation;
  - .3 have knowledge of vessel manoeuvring and station-keeping under various weather conditions;

Note there are no corresponding regulations in the Convention or sections in part A of the Code for sections B-V/a, B-V/b, B-V/c, B-V/d, B-V/e, B-V/f and B-V/g.

- .4 understand the specific design parameters of the vessels; and
- .5 understand the need to have unrestricted oversight and views of work areas.
- While on board an offshore supply vessel, the master and officers should:
  - .1 have knowledge of the handling characteristics and behaviour of vessels fitted with various propulsion arrangements; and
  - .2 be capable of operating the offshore supply vessel in close proximity to an offshore installation and other vessels.
- Masters should understand the need for other personnel on board who are involved in performing offshore supply operations to be familiarized with their duties.

Offshore supply vessels performing anchor-handling operations

- It is important that masters and officers in charge of a navigational watch on board offshore supply vessels involved in anchor-handling operations have relevant experience and training.
- 7 Prior to performing anchor-handling operations, masters and officers in charge of a navigational watch should:
  - .1 be well informed of the ship's handling characteristics in relation to anchor-handling, including, but not limited to:
    - .1.1 navigation and position-holding;
    - .1.2 ship-handling;
    - 1.3 thorough knowledge of the stability of offshore supply vessels, in particular the combination of low GZ<sub>max</sub>, low open deck and large external forces. Use of loading calculators and the conflict between a rigid and stiff ship and good work environment on deck. Potential reduction of stability from use of anti-rolling devices; and
    - operations in hazardous oil-field areas, including locating any pipelines or other structures on the seabed in the area where anchors or other mooring equipment is likely to be used; and
  - be made thoroughly familiar with the use of all instruments and systems fitted in the ship concerned and involved in anchor-handling, including their capabilities and limitations, including, but not limited to:
    - .2.1 use of various thrusters, conventional or azimuth propulsion;
    - .2.2 pickup, handling, heavy lifting, towing out, anchor-handling and laying of anchors for offshore rigs, barges and installations;
    - .2.3 towing of rigs, barges and other vessels;

- .2.4 operation of lifting and towing winches with up to 600 metric tons bollard pull;
- .2.5 detailed thorough knowledge of the basis of operation of towing- and anchor-handling winches; in particular, functions of load-limiting devices and release systems and associated equipment as towing pins and stoppers; and
- .2.6 the significant difference between emergency release of towing hooks and winches.
- Masters and officers in charge of a navigational watch when in charge of anchor-handling should have sufficient and appropriate training and experience by having been supervised during a number of Rig-moves, as deemed appropriate by the Administration. Training may be supplemented by appropriate simulator training.

# Section B-V/f\*

Guidance on the training and experience for personnel operating dynamic positioning systems

- 1 Dynamic positioning is defined as the system whereby a self-propelled vessel's position and heading is automatically controlled by using its own propulsion units.
- Personnel engaged in operating a Dynamic Positioning (DP) system should receive relevant training and practical experience. Theoretical elements of this training should enable Dynamic Positioning Operators (DPOs) to understand the operation of the DP system and its components. Knowledge, understanding and experience gained should enable personnel to operate vessels safely in DP, with due regard for safety of life at sea and protection of the marine environment.
- 3 The content of training and experience should include coverage of the following components of a DP system:
  - .1 DP control station;
  - .2 power generation and management;
  - .3 propulsion units;
  - .4 position reference systems;
  - .5 heading reference systems;
  - .6 environmental reference systems; and
  - .7 external force reference systems, such as hawser tension gauges.
- 4 Training and experience should cover the range of routine DP operations, as well as the handling of DP faults, failures, incidents and emergencies, to ensure that operations are continued or terminated safely. Training should not be limited to DPOs and DP masters only;

<sup>\*</sup> Note there are no corresponding regulations in the Convention or sections in part A of the Code for sections B-V/a, B-V/b, B-V/c, B-V/d, B-V/e, B-V/f and B-V/g.

other personnel on board, such as electro-technical and engineer officers, may require additional training and experience to ensure that they are able to carry out their duties on a DP vessel. Consideration should be given to conducting appropriate DP drills as a part of onboard training and experience. DPOs should be knowledgeable of the type and purpose of documentation associated with DP operations, such as operational manuals, Failure Modes and Effects Analysis (FMEAs) and capability plots.

- All training should be given by properly qualified and suitably experienced personnel.
- Upon appointment to a vessel operating in DP mode, the master, DPOs and other DP-trained personnel should be familiarized with the specific equipment fitted on and the characteristics of the vessel. Particular consideration should be given to the nature of the work of the vessel and the importance of the DP system to this work.

Section B-V/g\*

Guidance regarding training of masters and officers for ships operating in polar waters\*\*

- 1 It is important that masters, officers in charge of a navigational watch and officers in charge of an engineering watch on board ships operating in polar waters should have relevant experience and training, as follows:
  - .1 Prior to being assigned duties on board such ships:
    - .1.1 For masters and officers in charge of a navigational watch, the training should provide basic knowledge on at least the subjects given in paragraphs 2 to 11 hereunder; and
    - 1.2 For officers in charge of an engineering watch, the training should provide basic knowledge on at least the subjects given in paragraphs 3, 6, 10 and 11 hereunder.
  - .2 Masters and Chief Engineer Officers should have sufficient and appropriate experience in operating ships in polar waters.

### Ice characteristics - ice areas

Interpretation of different ice-charts and awareness of limitations in meteorology and oceanography data, ice physics, formation, growth, ageing and stage of melt; ice types and concentrations; ice pressure; friction from snow-covered ice; implications of spray-icing and icing up; precautions against icing up and mitigation of consequences; ice regimes in different regions and different seasons, including the differences between the Arctic and the Antarctic; recognition of consequences of rapid change in ice and weather conditions; movement of icebergs and pack ice.

Note there are no corresponding regulations in the Convention or sections in part A of the Code for sections B-V/a, B-V/b, B-V/c, B-V/d, B-V/e, B-V/f and B-V/g.

Refer to IMO Assembly resolution A.1024(26) on Guidelines for ships operating in polar waters.

# Ship's performance in ice and cold climate

Vessel characteristics; vessel types, hull designs; ice-strengthening requirements; ice-class of different classification societies — polar class and local regulations; limitations of ice-classes; winterization and preparedness of vessel; low-temperature system performance.

# Voyage and passage planning for a ship in ice\*

Development of safe routeing and passage planning to avoid ice where possible, including interpreting various forms of ice imagery and data to assist in the preparation of a strategic passage planning; entering ice from open water to avoid icebergs and dangerous ice conditions; navigation, determining when it is safe or not safe to enter areas containing ice or icebergs due to darkness, swell, fog or pressure ice.

# Operating and handling a ship in ice

- Preparations and risk assessment before approaching ice-infested waters; unassisted operation of vessels with different ice-class in different ice-types; safe speed in the presence of ice and icebergs; communications with an icebreaker and other vessels; navigation in various ice concentrations and coverage; awareness of the increase in energy of movement; use of icebergs for shelter and access through packed ice.
- 6 Use of different type of propulsion system and rudder, including awareness of system strength and capacity limitations; use of heeling and trim systems, engine loads and cooling problems.

# Regulations and recommendations

7 Local requirements for entering different regions, including the Antarctic Treaty; international regulations and recommendations.

# Equipment limitations

8 Use of and hazards associated with terrestrial navigational aids in polar waters; high-latitude compass errors; discrimination of radar targets and ice-features in ice-clutter; limitations of electronic positioning systems at high latitude; limitations in nautical charts and pilot descriptions; limitations in communication systems.

# Safety precautions and emergency procedures

Availability of hydrographic data sufficient for safe navigation; precautions when navigating in poorly charted waters; limitations of search and rescue readiness and responsibility, including GMDSS area A4 and its SAR communication facility limitation; awareness of contingency planning; knowledge of towing procedures; value of contact with other ships and local SAR organization; recognizing dangers when crews are exposed to low temperatures; procedures and techniques for abandoning the ship and survival on the ice; crew-fatigue problems due to noise and vibrations; carriage of additional resources such as bunkers, food and extra clothing; awareness of the additional severity of consequences of incidents in polar waters.

Refer to IMO Assembly resolution A.999(25) on Guidelines on voyage planning for passenger ships operating in remote areas.

10 Establishing safe working procedures; awareness of the most common hull and equipment damages and how to avoid them; fire-fighting systems limitations.

# Environmental considerations

Sensitive sea areas regarding discharge; areas where shipping is prohibited or should be avoided; Special Areas in MARPOL; oil-spill equipment limitations; plan for coping with increased volumes of garbage, bilge water, sludge, sewage, etc.; consequences of pollution in a cold climate.

### CHAPTER VI

# Guidance regarding emergency, occupational safety, security, medical care and survival functions

### Section B-VI/1

Guidance regarding mandatory requirements for safety familiarization and basic training and instruction for all seafarers

# FIRE PREVENTION AND FIRE FIGHTING

The training in fire prevention and fire fighting required by section A-VI/1 should include at least the theoretical and practical elements itemized in paragraphs 2 to 4 hereunder.\*

# Theoretical training

- The theoretical training should cover:
  - the three elements of fire and explosion (the fire triangle): fuel; source of ignition; oxygen;
  - ignition sources: chemical; biological; physical; .2
  - flammable materials: flammability; ignition point; burning temperature; burning .3 speed; thermal value; lower flammable limit (LFL); upper flammable limit (UFL); flammable range; inerting; static electricity; flashpoint; auto-ignition;
  - fire hazard and spread of fire by radiation, convection and conduction; .4
  - ,5 reactivity;
  - classification of fires and applicable extinguishing agents; .6
  - main causes of fire on board ships: oil leakage in engine-room; cigarettes; .7 overheating (bearings); galley appliances (stoves, flues, fryers, hotplates, etc.); spontaneous ignition (cargo, wastes, etc.); hot work (welding, cutting, etc.); electrical apparatus (short circuit, non-professional repairs); reaction, self-heating and auto-ignition; arson; static electricity;
  - fire prevention; 8.
  - fire- and smoke-detection systems; automatic fire alarms; .9
  - fire-fighting equipment, including: .10
    - fixed installations on board and their locations; fire mains, hydrants; .10.1international shore connection; smothering installations, carbon dioxide (CO2), foam; pressure water spray system in special category spaces, etc.;

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

automatic sprinkler system; emergency fire pump; emergency generator; chemical powder applicants; general outline of required and available mobile apparatus; high-pressure fog system; high-expansion foam; new developments and equipment;

- .10.2 firefighter's outfit, personal equipment; breathing apparatus; resuscitation apparatus; smoke helmet or mask; fireproof lifeline and harness; and their location on board; and
- .10.3 general equipment, including fire hoses, nozzles, connections, fire axes; portable fire extinguishers; fire blankets;
- construction and arrangements, including escape routes; means for gas-freeing tanks; Class A, B and C divisions; inert gas systems;
- ship fire-fighting organization, including general alarm; fire control plans, muster stations and duties of individuals; communications, including ship-shore when in port; personnel safety procedures; periodic shipboard drills; patrol systems;
- .13 practical knowledge of resuscitation methods;
- .14 fire-fighting methods, including sounding the alarm; locating and isolating; jettisoning; inhibiting; cooling; smothering; extinguishing; reflash watch; smoke extraction; and
- .15 fire-fighting agents, including water, solid jet, spray, fog, flooding; high, medium- and low-expansion foam; carbon dioxide (CO<sub>2</sub>); aqueous-film-forming foam (AFFF); dry chemical powder; new developments and equipment.

### Practical training

- The practical training given below should take place in spaces which provide truly realistic training conditions (e.g., simulated shipboard conditions), and whenever possible and practical should also be carried out in darkness as well as by daylight and should allow the trainees to acquire the ability to:
  - .1 use various types of portable fire extinguishers;
  - .2 use self-contained breathing apparatus;
  - .3 extinguish smaller fires, e.g., electrical fires, oil fires and propane fires;
  - .4 extinguish extensive fires with water (jet and spray nozzles);
  - ,5 extinguish fires with either foam, powder or any other suitable chemical agent;
  - .6 enter and pass through, with lifeline but without breathing apparatus, a compartment into which high-expansion foam has been injected;
  - .7 fight fire in smoke-filled enclosed spaces, wearing self-contained breathing apparatus;

- extinguish fire with water fog or any other suitable fire-fighting agent in an 8. accommodation room or simulated engine-room with fire and heavy smoke;
- extinguish an oil fire with fog applicator and spray nozzles; dry chemical powder .9 or foam applicators; and
- effect a rescue in a smoke-filled space, wearing breathing apparatus.

### General

Trainees should also be made aware of the necessity of maintaining a state of readiness on board.

# ELEMENTARY FIRST AID

The training in elementary first aid required by regulation VI/1 as part of the basic training should be given at an early stage in vocational training, preferably during pre-sea training, to enable seafarers to take immediate action upon encountering an accident or other medical emergency until the arrival of a person with first-aid skills or the person in charge of medical care on board.

# PERSONAL SAFETY AND SOCIAL RESPONSIBILITIES\*

- Administrations should bear in mind the significance of communication and language skills in maintaining safety of life and property at sea and in preventing marine pollution. Given the international character of the maritime industry, the reliance on voice communications from ship to ship and from ship-to-shore, the increasing use of multinational crews, and the concern that crew members should be able to communicate with passengers in an emergency, adoption of a common language for maritime communications would promote safe practice by reducing the risk of human error in communicating essential information.
- Although not universal, by common practice English is rapidly becoming the standard language of communication for maritime safety purposes, partly as a result of the use of the IMO Standard Marine Communication Phrases.
- Administrations should consider the benefits of ensuring that seafarers have an ability to use at least an elementary English vocabulary, with an emphasis on nautical terms and situations.

### Section B-VI/2

Guidance regarding certification for proficiency in survival craft, rescue boats and fast rescue boats

- Before training is commenced, the requirement of medical fitness, particularly regarding eyesight and hearing, should be met by the candidate.
- The training should be relevant to the provisions of the International Convention for the Safety of Life at Sea (SOLAS), as amended.
- Parties may also accept onboard training and experience (such as participation in drills) for maintaining the required standard of competence of table A-VI/2-1, in the areas outlined in

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

section A-VI/2, paragraphs 6.1.2, 6.1.3, 6.1.4, 6.2.1, and 12.1.5. Administrations should bear in mind that onboard training in these areas can only be carried out under good weather conditions and port regulations permitting.

### Section B-VI/3

Guidance regarding training in advanced fire fighting

(No provisions)

### Section B-VI/4

Guidance regarding requirements in medical first aid and medical care

Training programmes for seafarers designated to undertake the tasks, duties and responsibilities listed in column 1 of table A-VI/4-1 to provide medical first aid on board ship should take into account guidance in the revised International Medical Guide for Ships, as appropriate.

### Section B-VI/5

Guidance regarding training and certification for ship security officers

- 1 The training should be relevant to the provisions of the ISPS Code and the SOLAS Convention, as amended.
- 2 On completion of training, a ship security officer should have adequate knowledge of the English language to correctly interpret and communicate messages relevant to ship or port facility security.
- In circumstances of exceptional necessity, when a person holding a certificate of proficiency as a ship security officer is temporarily unavailable, the Administration may permit a seafarer having specific security duties and responsibilities and an understanding of the ship security plan to serve as ship security officer and to execute all duties and responsibilities of the ship security officer until the next port of call or for a period not exceeding 30 days, whichever is greater. The company should, as soon as possible, inform the competent authorities of the next port(s) of call of the arrangements in place.

### Section B-VI/6

Guidance regarding mandatory minimum requirements for security-related training and instruction for all seafarers

### Familiarization and security-awareness

- Seafarers and shipboard personnel are not security experts and it is not the aim of the provisions of the Convention or this Code to convert them into security specialists.
- Seafarers and shipboard personnel should receive adequate security-related training or instruction and familiarization training so as to acquire the required knowledge and understanding to perform their assigned duties and to collectively contribute to the enhancement of maritime security.

The relevant IMO Model Course(s) may be of assistance in the preparation of courses.

Seafarers without designated security duties should complete the security awareness training or instruction set out in section A-VI/6 at least one time in their career. There is no need for refreshment or revalidation of this training if the seafarer or the shipboard personnel concerned meet the security-related familiarization requirements of regulation VI/6 and participate in the drills and exercises required by the ISPS Code.

# Seafarers with designated security duties

- The expression "with designated security duties" in section A-VI/6 denotes those having specific security duties and responsibilities in accordance with the ship security plan.
- Seafarers with designated security duties should complete the training as set out in section A-VI/6 at least one time in their career. There is no need for refreshment or revalidation of this training if the seafarer or the shipboard personnel concerned meet the security-related familiarization requirements of regulation VI/6 and participate in the drills and exercises required by the ISPS Code.
- 6 Those providing "security-related familiarization training" in accordance with section A-VI/6 should not be required to meet the requirements of either regulation I/6 or of section A-I/6.
- In circumstances of exceptional necessity, when the shipboard security-related duties are required to be undertaken by a person qualified to perform designated security-related duties and such a person is temporarily unavailable, the Administration may permit a seafarer without designated security duties to perform such duties provided such a person has an understanding of the ship security plan, until the next port of call or for a period not exceeding 30 days, whichever is greater.

### CHAPTER VII

# Guidance regarding alternative certification

# Section B-VII/1

Guidance regarding the issue of alternative certificates

(No provisions)

### Section B-VII/2

Guidance regarding special integrated deck and engine training programmes

- Each Party should ensure that any special integrated deck and engine training programme:
  - .1 is provided by means of an approved training programme;
  - .2 takes place ashore within maritime training institutions and/or on board approved training ships; and
  - .3 is documented in an approved training record book.

### Section B-VII/3

Guidance regarding principles governing the issue of alternative certificates

(No provisions)

### CHAPTER VIII

# Guidance regarding watchkeeping

Section B-VIII/1
Guidance regarding fitness for duty

# Prevention of fatigue

- In observing the rest period requirements, "overriding operational conditions" should be construed to mean only essential shipboard work which cannot be delayed for safety, security or environmental reasons or which could not reasonably have been anticipated at the commencement of the voyage.
- Although there is no universally accepted technical definition of fatigue, everyone involved in ship operations should be alert to the factors which can contribute to fatigue, including, but not limited to, those identified by the Organization, and take them into account when making decisions on ship operations.
- In applying regulation VIII/1, the following should be taken into account:
  - .I provisions made to prevent fatigue should ensure that excessive or unreasonable overall working hours are not undertaken. In particular, the minimum rest periods specified in section A-VIII/1 should not be interpreted as implying that all other hours may be devoted to watchkeeping or other duties;
  - the frequency and length of leave periods, and the granting of compensatory leave, are material factors in preventing fatigue from building up over a period of time; and
  - .3 the provisions may be varied for ships on short sea voyages, provided special safety arrangements are put in place.
- Exceptions provided for in section A-VIII/1, paragraph 9, should be construed to mean the exceptions laid down by the ILO Convention on Seafarers' Hours of Work and the Manning of Ships, 1996 (No.180) or the Maritime Labour Convention, 2006, when it enters into force. The circumstances under which such exceptions are applied should be defined by the Parties.
- 5 Based on information received as a result of investigating maritime casualties, Administrations should keep their provisions on prevention of fatigue under review.

### Prevention of drug and alcohol abuse

Drug and alcohol abuse directly affect the fitness and ability of a seafarer to perform watchkeeping duties or duties that involve designated safety, prevention of pollution and security duties. Seafarers found to be under the influence of drugs or alcohol should not be permitted to perform watchkeeping duties or duties that involve designated safety, prevention of pollution and security duties, until they are no longer impaired in their ability to perform those duties.

See the annex to IMO Assembly resolution A.772(18) on Fatigue factor in manning and safety, paragraphs 2 to 4.4.1 and MSC/Circ.1014. on Guidance on fatigue mitigation and management.

- Administrations should ensure that adequate measures are taken to prevent alcohol and drugs from impairing the ability of watchkeeping personnel and those whose duties involve designated safety, prevention of pollution and security duties, and should establish screening programmes as necessary which:
  - .1 identify drug and alcohol abuse;
  - .2 respect the dignity, privacy, confidentiality and fundamental legal rights of the individuals concerned; and
  - .3 take into account relevant international guidelines.
- 8 Companies should consider the implementation of a clearly written policy of drug and alcohol abuse prevention, including prohibition to consume alcohol within four hours prior to serving as a member of a watch either by inclusion in the company's quality-management system or by means of providing adequate information and education to the seafarers.
- Those involved in establishing drug and alcohol abuse prevention programmes should take into account the guidance contained in the ILO publication *Drug and Alcohol Prevention Programmes in the Maritime Industry (A Manual for Planners)*, as may be amended.

### Section B-VIII/2

Guidance regarding watchkeeping arrangements and principles to be observed

The following operational guidance should be taken into account by companies, masters and watchkeeping officers.

PART 1 - GUIDANCE ON CERTIFICATION

(No provisions)

PART 2 – GUIDANCE ON VOYAGE PLANNING

(No provisions)

PART 3 - WATCHKEEPING PRINCIPLES IN GENERAL

(No provisions)

Annex III of this manual includes "Guiding Principles on Drug and Alcohol Testing procedures for Worldwide Application in the Maritime Industry". These guiding principles were adopted by the Joint ILO/WHO Committee on the Health of Seafarers (May 1993).

# PART 4 – GUIDANCE ON WATCHKEEPING AT SEA

# Part 4-1 - Guidance on keeping a navigational watch

### Introduction

- 2 Particular guidance may be necessary for special types of ships as well as for ships carrying hazardous, dangerous, toxic or highly flammable cargoes. The master should provide this operational guidance as appropriate.
- It is essential that officers in charge of the navigational watch appreciate that the efficient performance of their duties is necessary in the interests of the safety of life, security and property at sea and of preventing pollution of the marine environment.

### Anchor watch

- The master of every ship at an unsheltered anchorage, at an open roadstead or any other virtually "at sea" conditions in accordance with chapter VIII, section A-VIII/2, part 4-1, paragraph 51 of the STCW Code, should ensure that watchkeeping arrangements are adequate for maintaining a safe watch at all times. A deck officer should at all times maintain responsibility for a safe anchor watch.
- In determining the watchkeeping arrangements, and commensurate with maintaining the ship's safety and security and the protection of the marine environment, the master should take into account all pertinent circumstances and conditions such as:
  - .1 maintaining a continuous state of vigilance by sight and hearing as well as by all other available means;
  - .2 ship-to-ship and ship-to-shore communication requirements;
  - .3 the prevailing weather, sea, ice and current conditions;
  - .4 the need to continuously monitor the ship's position;
  - .5 the nature, size and characteristics of anchorage;
  - .6 traffic conditions;
  - .7 situations which might affect the security of the ship;
  - .8 loading and discharging operations;
  - .9 the designation of stand-by crew members; and
  - .10 the procedure to alert the master and maintain engine readiness.

# Part 4-2 - Guidance on keeping an engineering watch

- Particular guidance may be necessary for special types of propulsion systems or ancillary equipment and for ships carrying hazardous, dangerous, toxic or highly flammable materials or other special types of cargo. The chief engineer officer should provide this operational guidance as appropriate.
- It is essential that officers in charge of the engineering watch appreciate that the efficient performance of engineering watchkeeping duties is necessary in the interest of the safety of life and property at sea and of preventing pollution of the marine environment.
- The relieving officer, before assuming charge of the engineering watch, should:
  - .1 be familiar with the location and use of the equipment provided for the safety of life in a hazardous or toxic environment;
  - .2 ascertain that materials for the administration of emergency medical first aid are readily available, particularly those required for the treatment of burns and scalds; and
  - .3 when in port, safely anchored or moored, be aware of:
    - .3.1 cargo activities, the status of maintenance and repair functions and all other operations affecting the watch, and
    - .3.2 the auxiliary machinery in use for passenger or crew accommodation services, cargo operations, operational water supplies and exhaust systems.

# Part 4-3 – Guidance on keeping a radio watch

### General

- Among other things, the Radio Regulations require that each ship radio station is licensed, is under the ultimate authority of the master or other person responsible for the ship and is only operated under the control of adequately qualified personnel. The Radio Regulations also require that a distress alert shall only be sent on the authority of the master or other person responsible for the ship.
- The master should bear in mind that all personnel assigned responsibility for sending a distress alert must be instructed with regard to, be knowledgeable of, and be able to operate properly all radio equipment on the ship, as required by regulation I/14, paragraph 1.5. This should be recorded in the deck or radio log-book.

### Watchkeeping

- In addition to the requirements concerning radio watchkeeping, the master of every seagoing ship should ensure that:
  - .1 the ship's radio station is adequately manned for the purpose of exchanging general communications in particular public correspondence, taking into account the constraints imposed by the duties of those authorized to operate it; and

- .2 the radio equipment provided on board and, where fitted, the reserve sources of energy are maintained in an efficient working condition.
- Necessary instruction and information on use of radio equipment and procedures for distress and safety purposes should be given periodically to all relevant crew members by the person designated in the muster list to have primary responsibility for radiocommunications during distress incidents. This should be recorded in the radio log.
- 13 The master of every ship not subject to the SOLAS, 1974 should require that radio watchkeeping is adequately maintained as determined by the Administration, taking into account the Radio Regulations.

# Operational

- 14 Prior to sailing, the radio operator designated as having primary responsibility for radiocommunications during distress incidents should ensure that:
  - .1 all distress and safety radio equipment and the reserve source of energy are in an efficient working condition, and that this is recorded in the radio log;
  - .2 all documents required by international agreement, notices to ship radio stations and additional documents required by the Administration are available and are corrected in accordance with the latest supplements, and that any discrepancy is reported to the master;
  - .3 the radio clock is correctly set against standard time signals;
  - .4 antennae are correctly positioned, undamaged and properly connected; and
  - .5 to the extent practicable, routine weather and navigational warning messages for the area in which the ship will be navigating are updated together with those for other areas requested by the master, and that such messages are passed to the master.
- On sailing and opening the station, the radio operator on watch should:
  - .1 listen on the appropriate distress frequencies for any possible existing distress situation; and
  - .2 send a traffic report (name, position and destination, etc.) to the local coast station and any other appropriate coast station from which general communications may be expected.
- While the station is open, the radio operator on watch should:
  - .1 check the radio clock against standard time signals at least once a day;
  - .2 send a traffic report when entering and on leaving the service area of a coast station from which general communications might be expected; and
  - .3 transmit reports to ship reporting systems in accordance with the instructions of the master.

- 1/ while at sea, the radio operator designated as having primary responsibility for radiocommunications during distress incidents should ensure the proper functioning of:
  - .1 the digital selective calling (DSC) distress and safety radio equipment by means of a test call at least once each week; and
  - .2 the distress and safety radio equipment by means of a test at least once each day but without radiating any signal.

The results of these tests should be recorded in the radio log.

- The radio operator designated to handle general communications should ensure that an effective watch is maintained on those frequencies on which communications are likely to be exchanged, having regard to the position of the ship in relation to those coast stations and to coast earth stations from which traffic may be expected. When exchanging traffic, radio operators should follow the relevant ITU recommendations.
- When closing the station on arrival at a port, the radio operator on watch should advise the local coast station and other coast stations with which contact has been maintained of the ship's arrival and of the closing of the station.
- When closing the radio station, the radio operator designated as having primary responsibility for radiocommunications during distress incidents should:
  - .1 ensure that transmitting antennae are earthed; and
  - .2 check that the reserve sources of energy are sufficiently charged.

### Distress alerts and procedures

- 21 The distress alert or distress call has absolute priority over all other transmissions. All stations which receive such signals are required by the Radio Regulations to immediately cease all transmissions capable of interfering with distress communications.
- In the case of a distress affecting own ship, the radio operator designated as having primary responsibility for radiocommunications during distress incidents should immediately assume responsibility for following the procedures of the Radio Regulations and relevant ITU-R Recommendations.
- 23 On receiving a distress alert:
  - .1 the radio operator on watch should alert the master and, if appropriate, the radio operator designated as having primary responsibility for radiocommunications during distress incidents; and
  - .2 the radio operator designated as having primary responsibility for radiocommunications during distress incidents should evaluate the situation and immediately assume responsibility for following the procedures of the Radio Regulations and relevant ITU-R Recommendations.

# Urgency messages

- In cases of urgency affecting own ship, the radio operator designated as having responsibility for radiocommunications during distress incidents should immediately assume responsibility for following the procedures of the Radio Regulations and relevant ITU-R Recommendations.
- In cases of communications relating to medical advice, the radio operator designated as having primary responsibility for radiocommunications during distress incidents should follow the procedures of the Radio Regulations and adhere to the conditions as published in the relevant international documentation (see paragraph 14.2) or as specified by the satellite service provider.
- In cases of communications relating to medical transports, as defined in the Protocol additional to the Geneva Conventions of 12 August 1949, and relating to the protection of victims of international armed conflicts (Protocol I), the radio operator designated as having primary responsibility for radiocommunication during distress incidents should follow the procedures of the Radio Regulations.
- On receiving an urgency message, the radio operator on watch should alert the master and, if appropriate, the radio operator designated as having primary responsibility for radiocommunications during distress incidents.

### Safety messages

- When a safety message is to be transmitted, the master and the radio operator on watch should follow the procedures of the Radio Regulations.
- On receiving a safety message, the radio operator on watch should note its content and act in accordance with the master's instructions.
- 30 Bridge-to-bridge communications should be exchanged on VHF channel 13. Bridge-to-bridge communications are described as "Intership Navigation Safety Communications" in the Radio Regulations.

### Radio records

- Additional entries in the radio log should be made in accordance with paragraphs 10, 12, 14, 17 and 33.
- Unauthorized transmissions and incidents of harmful interference should, if possible, be identified, recorded in the radio log and brought to the attention of the Administration in compliance with the Radio Regulations, together with an appropriate extract from the radio log.

# Battery maintenance

- Batteries providing a source of energy for any part of the radio installation, including those associated with uninterrupted power supplies, are the responsibility of the radio operator designated as having primary responsibility for radiocommunications during distress incidents and should be:
  - .1 tested on-load and off-load daily and, where necessary, brought up to the fully charged condition;

- tested once per week by means of a hydrometer where practicable, or, where a hydrometer cannot be used, by a suitable load test; and
- .3 checked once per month for the security of each battery and its connections and the condition of the batteries and their compartment or compartments.

The results of these tests should be recorded in the radio log.

# PART 5 - GUIDANCE ON WATCHKEEPING IN PORT

(No provisions)"

# Τέταρτο Μέρος

#### ΑΠΟΦΑΣΗ 1

Οι τροποποιήσεις της Διάσκεψης της Μανίλα στο Παράρτημα της Διεθνούς Συμβάσεως Σχετικά με τα Πρότυπα Εκπαίδευσης, Έκδοσης Πιστοποιητικών και Τήρησης Φυλακής Ναυτικών (STCW), του 1978

# Η ΔΙΑΣΚΕΨΗ ΤΟΥ 2010 ΣΤΗ ΜΑΝΙΛΑ.

ΑΝΑΦΕΡΟΜΕΝΗ στο άρθρο ΧΙΙ(1)(b) της Διεθνούς Σύμβασης για τα Πρότυπα Εκπαίδευσης Έκδοσης Πιστοποιητικών και Τήρησης Φυλακής Ναυτικών, 1978, (αναφερόμενη από εδώ και κάτω ως "Η Σύμβαση"), σχετικά με την διαδικασία για αναθεώρηση της Σύμβασης από την διάσκεψη των Μελών,

**ΛΑΜΒΑΝΟΝΤΑΣ ΥΠ' ΟΨΗ** τις προτεινόμενες και κοινοποιηθείσες στα Μέλη του Οργανισμού και όλα τα Μέρη της Σύμβασης, τροποποιήσεις της Μανίλα στο παράρτημα της Σύμβασης,

- 1. ΥΙΟΘΕΤΕΙ, σύμφωνα με το άρθρο ΧΙΙ(1)(b)(ii) της Σύμβασης, τροποποιήσεις στο παράρτημα της Σύμβασης, το κείμενο των οποίων εμφανίζεται στο Παράρτημα της παρούσας απόφασης,
- 2. ΠΡΟΣΔΙΟΡΙΖΕΙ, σύμφωνα με το άρθρο XII(1)(a)(vii) της Σύμβασης, ότι οι τροποποιήσεις που προσαρτώνται εδώ θα θεωρηθεί ότι έχουν γίνει αποδεκτές την 1η Ιουλίου 2011, εκτός εάν, πριν από αυτή την ημερομηνία, περισσότερα από το ένα τρίτο των Μερών της Σύμβασης ή Μέρη, των οποίων το συνολικό μέγεθος των στόλων τους αποτελεί όχι λιγότερο από το 50% της χωρητικότητας του παγκοσμίου στόλου που αποτελείται από πλοία χωρητικότητας άνω των 100 κ.ο.χ ή μεγαλυτέρων, έχουν ενημερώσει τον Γενικό Γραμματέα ότι διαφωνούν με τις τροποποιήσεις.
- 3. ΠΡΟΣΚΑΛΕΙ τα Μέρη να σημειώσουν ότι, σύμφωνα με το άρθρο Χὶ!(1)(a(ix) της Σύμβασης, οι τροποποιήσεις που περιέχονται στην παρούσα, θα τεθούν αε εφαρμογή την 1<sup>η</sup> Ιανουαρίου 2012, εφ' όσον θεωρηθεί οτι έχουν γίνει αποδεκτές σύμφωνα με την παραπάνω παράγραφο 2.
- 4. **ΖΗΤΑ** από το Γενικό Γραμματέα του Οργανισμού να διαβιβάσει σε όλα τα Μέρη της Σύμβασης, επικυρωμένα αντίγραφα της παρούσας Απόφασης και το κείμενο των τροποποιήσεων που περιλαμβάνονται στο παράρτημα της Σύμβασης.
- 5. ΕΠΙΠΛΕΟΝ ΖΗΤΑ από το Γενικό Γραμματέα να διαβιβάσει αντίγραφα της απόφασης και του παραρτήματος σε όλα τα Μέλη του Οργανισμού που δεν είναι Μέρη της Σύμβασης.

### ПАРАРТНИА

# ΟΙ ΤΡΟΠΟΠΟΙΗΣΕΙΣ ΤΗΣ ΔΙΑΣΚΕΨΗΣ ΤΗΣ ΜΑΝΙΛΑ ΣΤΟ ΠΑΡΑΡΤΗΜΑ ΤΗΣ ΔΙΕΘΝΟΥΣ ΣΥΜΒΑΣΗΣ ΓΙΑ ΤΑ ΠΡΟΤΥΠΑ ΕΚΠΑΙΔΕΥΣΗΣ ΕΚΔΟΣΗΣ ΠΙΣΤΟΠΟΙΗΤΙΚΩΝ ΚΑΙ ΤΗΡΗΣΗΣ ΦΥΛΑΚΗΣ ΓΙΑ ΤΟΥΣ ΝΑΥΤΙΚΟΥΣ ,ΤΟΥ 1978

Το παράρτημα της Διεθνούς Σύμβασης για τα Πρότυπα Εκπαίδευσης, Πιστοποίησης και Τήρησης Φυλακής για τους ναυτικούς του 1978, αντικαθίσταται ως εξής:

### «ПАРАРТНМА

### ΚΕΦΑΛΑΙΟ 1

# ΓΕΝΙΚΕΣ ΔΙΑΤΑΞΕΙΣ

# Κανονισμός 1/1

Ορισμοί και διευκρινίσεις

- 1. Για το σκοπό της Σύμβασης, εκτός εάν ρητά προβλέπεται διαφορετικά:
  - .1 "Κανονισμοί" σημαίνει κανονισμούς που περιέχονται στο παράρτημα της Σύμβασης,
  - .2 "Έγκεκριμένα" σημαίνει εγκεκριμένα από το Μέρος σύμφωνα με αυτούς τους κανονισμούς,
  - .3 "Πλοίαρχος" σημαίνει το άτομο το οποίο διοικεί το πλοίο,
  - .4 "Αξιωματικός" σημαίνει μέλος του πληρώματος, εκτός από τον πλοίαρχο, που καθορίζεται έτσι από την εθνική νομοθεσία ή τους κανονισμούς ή όταν δεν υπάρχει τέτοια διάκριση/καθορισμός, όπως ορίζεται από συλλογική σύμβαση ή έθιμο,
  - .5 "Αξιωματικός καταστρώματος" σημαίνει τον προσοντούχο αξιωματικό σύμφωνα με τις διατάξεις του κεφαλαίου ΙΙ της Σύμβασης,
  - .6 "Υποπλοίαρχος" σημαίνει τον αξιωματικό, σε βαθμό αμέσως μετά τον πλοίαρχο, στον οποίο θα περιέλθει η διοίκηση του πλοίου σε περίπτωση αδυναμίας του πλοιάρχου,
  - .7 "Αξιωματικός μηχανής" σημαίνει τον προσοντούχο αξιωματικό σύμφωνα με τις διατάξεις του κεφαλαίου ΙΙΙ/1, ΙΙΙ/2 ή ΙΙΙ/3 της Σύμβασης.
  - .8 "Πρώτος μηχανικός" σημαίνει τον αρχαιότερο αξιωματικό μηχανής που είναι υπεύθυνος για την μηχανική πρόωση και την λειτουργία και συντήρηση των μηχανολογικών-και ηλεκτρολογικών εγκαταστάσεων του πλοίου,
  - .9 "Δεύτερος μηχανικός" σημαίνει τον αξιωματικό μηχανής σε βαθμό αμέσως μετά τον πρώτο μηχανικό στον οποίο θα περιέλθει η ευθύνη για την μηχανική πρόωση, λειτουργία και συντήρηση των μηχανολογικών και ηλεκτρολογικών εγκαταστάσεων του πλοίου σε περίπτωση ανικανότητας του πρώτου μηχανικού,
  - .10 "Βοηθός μηχανικός" σημαίνει το άτομο που εκπαιδεύεται για να γίνει μηχανικός και ορίζεται έτσι από την εθνική νομοθεσία ή τους κανονισμούς,
  - .11 "Χειριστής ραδιοεπικοινωνιών" σημαίνει το άτομο το οποίο διαθέτει κατάλληλο πιστοποιητικό που εκδόθηκε ή αναγνωρίστηκε από την Αρχή σύμφωνα με τις διατάξεις των Κανονισμών Ραδιοεπικοινωνιών,
    - .12 " Χειριστής ραδιοεπικοινωνιών Παγκόσμιου Ναυτιλιακού Συστήματος Κινδύνου και Ασφάλειας (GMDSS) " σημαίνει **το** προσοντούχο άτομο ,σύμφωνα με τις διατάξεις του κεφαλαίου IV της Σύμ-βασης,
    - .13 "Μέλος πληρώματος" σημαίνει μέλος του πληρώματος του πλοίου ,εκτός του πλοίαρχου ή του αξιωματικού,

- .14 "Παράκτιοι πλόες" σημαίνει πλόες στην περιοχή δικαιοδοσίας ενός Μέρους, που έχουν ορισθεί από αυτό το Μέρος,
- .15 "Ισχύς πρόωσης" σημαίνει την συνολική συνεχή ισχύ εξόδου σε κιλοβάτ, όλων των κυρίων μηχανών πρόωσης του πλοίου, που είναι καταχωρημένη στο πιστοποιητικό εθνικότητας του πλοίου ή σε άλλο επίσημο έγγραφο,
- .16 "Καθήκοντα ραδιοεπικοινωνιών" περιλαμβάνουν, κατά περίπτωση, τήρηση φυλακής και τεχνική συντήρηση και επισκευή που γίνονται σύμφωνα με τους Κανονισμούς Ραδιοεπικοινωνιών, τη Διεθνή Σύμβαση για την Ασφάλεια της Ανθρώπινης Ζωής στην Θάλασσα, του 1974 (SOLAS), όπως τροποποιήθηκε και, κατά την κρίση κάθε Αρχής, τις σχετικές συστάσεις του Οργανισμού,
- .17 "Πετρελαιοφόρο Δεξαμενόπλοιο" σημαίνει πλοίο που ναυπηγήθηκε και χρησιμοποιείται για την μεταφορά πετρελαίου και προϊόντων πετρελαίου χύδην,
- .18 "Χημικό Δεξαμενόπλαιο " σημαίνει πλοίο που κατασκευάσθηκε ή μετασκευάσθηκε και χρησιμοπαείται για την χύδην μεταφορά οποιουδήποτε υγρού προϊόντος που μνημονεύεται στο κεφάλαιο 17 του Διεθνούς Κώδικα Χύδην Χημικών,
- .19 "Δεξαμενόπλοιο Υγραέριοφόρο" σημαίνει πλοίο που κατασκευάσθηκε ή μετασκευάσθηκε και χρησιμοποιείται για την χύδην μεταφορά οποιουδήποτε υγροποιημένου αερίου ή άλλου προϊόντος που παρατίθενται στο κεφάλαιο 19 του Διεθνούς Κώδικα Υγραεριοφόρων,
- .20 "Επιβατηγό πλοίο". σημαίνει το πλοίο όπως ορίζεται από τη Διεθνή Σύμβαση για την Ασφάλεια της Ανθρώπινης Ζωής στη Θάλασσα, του 1974, όπως τροποποιήθηκε,
- .21 "Επιβατηγό πλοίο Ro-Ro" σημαίνει επιβατηγό πλοίο το οποίο διαθέτει χώρους Ro-Ro ή χώρους ειδικής κατηγορίας όπως ορίζονται στην Διεθνή Σύμβαση για την Ασφάλεια της Ανθρώπινης Ζωής στην Θάλασσα του 1974 (SOLAS), όπως τροποποιήθηκε,
- .22 "Μήνας" σημαίνει τον ημερολογιακό μήνα των 30 ημερών που απαρτίζονται από περιόδους μικρότερες του μήνα,
- .23 "Κώδικας STCW" σημαίνει τον Κώδικα Εκπαίδευσης, Έκδοσης πιστοποιητικών και Τήρησης Φυλακών Ναυτικών όπως υιοθετήθηκε από την Συνέλευση του 1995 με την Απόφαση 2, όπως ενδέχεται να τροποιποιηθεί από τον Οργανισμό,
- .24 "Λειτουργία" σημαίνει ομάδα εργασιών καθηκόντων και ευθυνών όπως καθορίζονται στον Κώδικα STCW, που είναι απαραίτητα για την λειτουργία του πλοίου, την ασφάλεια της ζωής στην θάλασσα ή την προστασία του θαλάσσιου περιβάλλοντος,
- .25 "Εταιρεία" σημαίνει τον ιδιοκτήτη του πλοίου ή οπαιοδήποτε άλλο οργανισμό ή άτομο όπως ο διαχειριστής ή ο ναυλωτής γυμνού σκάφους, που έχει επωμισθεί την ευθύνη λειτουργίας του πλοίου από τον πλαιοκτήτη και ο οποίος αναλαμβάνοντας αυτή την ευθύνη συμφώνησε να αναλάβει όλα τα καθήκοντα και ευθύνες που επιβάλλονται στην εταιρεία από αυτούς τους κανονισμούς.
- .26 "Θαλάσσια υπηρεσία" σημαίνει την υπηρεσία σε πλοίο που είναι απαραίτητη για την έκδοση ή την αναθεώρηση πιστοποιητικού ή άλλου προσόντος,
- .27 "Κώδικας ISPS" σημαίνει τον Διεθνή Κώδικα για την ασφάλεια των πλοίων και των λιμενικών εγκαταστάσεων, που υιοθετήθηκε στις 12 Δεκεμβρίου 2002με την απόφαση 2 της Διάσκεψης των συμβαλλομένων κρατών στη Διεθνή Σύμβαση για την Ασφάλεια της Ανθρώπινης Ζωής στη Θάλασσα, του 1974 (Σύμβαση SOLAS), όπως ενδέχεται να τροποποιήθει από τον Οργανισμό,
- .28 "Αξιωματικός προστασίας του πλοίου (ship security officer)" σημαίνει το άτομο που επιβαίνει στο πλοίο, το οποίο είναι υπόλογο στον Πλοίαρχο, που έχει οριστεί από την Εταιρεία υπεύθυνο για την προστασία του πλοίου, συμπεριλαμβανομένων της εφαρμογής και διατήρησης του σχεδίου προστασίας του πλοίου και ως σύνδεσμος με τον υπεύθυνο προστασίας της Εταιρείας και τους υπεύθυνους προστασίας της λιμενικής εγκατάστασης,
- .29 "Τα καθήκοντα προστασίας " περιλαμβάνουν όλες τις εργασίες και τα καθήκοντα προστασίας επί του πλοίου, όπως ορίζονται από το κεφάλαιο ΧΙ-2 της Διεθνούς Σύμβασης για την Ασφάλεια της

Ανθρώπινης Ζωής στη Θάλασσα, (SOLAS 1974, όπως τροποπαιήθηκε) και του Διέθνούς Κώδικα για την ασφάλεια των πλοίων και των λιμενικών εγκαταστάσεων (ISPS),

- .30 "πιστοποιητικό ικανότητας" σημαίνει το πιστοποιητικό που εκδόθηκε και θεωρήθηκε για πλοίαρχους, αξιωματικούς και χειριστές ασυρμάτου GMDSS, σύμφωνα με τις διατάξεις των κεφαλαίων Ι- Ι,ΙΙΙ,ΙV ή VII αυτού του παραρτήματος, και το οποίο επιτρέπει στον νόμιμο κάτοχό του να υπηρετεί σύμφωνα με τη σχετική ιδιότητα και να εκτελεί τις σχετικές λειτουργίες στο επίπεδο ευθύνης που προσδιορίζεται με αυτό,
- .31 "Πιστοπαιητικό επάρκειας" σημαίνει το πιστοπαιητικό εκτός του πιστοπαιητικού ικανότητας, που εκδίδεται για ναυτικό και το οποίο δηλώνει ότι πληρούνται οι σχετικές απαιτήσεις εκπαίδευσης, οι ικανότητες και η θαλάσσια υπηρεσία που προβλέπεται από τη Σύμβαση,
- .32 "Αποδεικτικό έγγραφο" σημαίνει το έγγραφο, εκτός του πιστοποιητικού ικανότητας και του πιστοποιητικού επάρκειας, που χρησιμοποιείται για να αποδειχθεί η εκπλήρωση των σχετικών με τη Σύμβαση απαιτήσεων,
- .33 "Ηλεκτροτεχνικός αξιωματικός" σημαίνει τον αξιωματικό που διαθέτει τα προσόντα σύμφωνα με τις διατάξεις του κανονισμού ΙΙΙ/ 6 της Σύμβασης,
- :34 "εδικευμένος ναυτικός καταστρώματος" σημαίνει το μέλος πληρώματος, που διαθέτει τα προσόντα σύμφωνα με τις διατάξεις του κανονισμού ΙΙ /5 της Σύμβασης,
- .35 "ειδικευμένος ναυτικός μηχανής" σημαίνει το μέλος πληρώματος, που διαθέτει τα προσόντα σύμφωνα με τις διατάξεις του κανονισμού ΙΙΙ /5 της Σύμβασης, και
- .36 "Ηλεκτροτεχνικός μέλος πληρώματος" σημαίνει το μέλος πληρώματος, που διαθέτει τα προσόντα σύμφωνα με τις διατάξεις του κανονισμού ΙΙΙ /7 της Σύμβασης.
- 2 Οι Κανονισμοί αυτοί συμπληρώνονται από τις υποχρεωτικές διατάξεις που περιέχονται στο μέρος Α του Κώδικα STCW, κα:
  - .1 οποιαδήποτε αναφορά σε απαίτηση ενός κανονισμού αποτελεί αναφορά και στο αντίστοιχο τμήμα του μέρους Α του Κώδικα STCW,
  - .2 κατά την εφαρμογή αυτών των κανονισμών α σχετικές οδηγίες και το επεξηγηματικό υλικό που περιέχονται στο μέρος Β του Κώδικα STCW θα πρέπει να λαμβάνονται υπόψη στον μεγαλύτερο δυνατό βαθμό ώστε να επιτευχθεί η πλέον ομαιόμορφη εφαρμογή των διατάξεων της Σύμβασης σε παγκόσμιο επίπεδο,
  - .3 Οι τροποπαιήσεις του μέρους Α του Κώδικα STCW θα υιοθετηθούν, θα τεθούν σε ισχύ και θα αρχίσουν να εφαρμόζονται σύμφωνα με τις διατάξεις του άρθρου ΧΙΙ της Σύμβασης που αφορούν την διαδικασία τροποποίησης που ισχύει για το παράρτημα, και
  - --4-το μέρος Β-του Κώδικα\_STCW θα τροποπαείται από την Επιτροπή Ναυτικής Ασφάλειας σύμφωνα με τους δικούς της διαδικαστικούς κανόνες.
  - 3 Οι αναφορές στην "Αρχή" και στην "εκδίδουσα Αρχή" που γίνονται στο άρθρο VI της Σύμβασης δεν θα θεωρούνται ότι εμποδίζουν ότια ο Μέρος από το να εκδίδει και να θεωρεί πιστοπαιητικά σύμφωνα με τις διατάξεις αυτών των κανονισμών.

### Κανονισμός Ι/2

Πιστοποιητικά και θεωρήσεις

- Πιστοπαιητικά ικανότητας θα εκδίνονται μονο από την Αρχή, ακολουθώντας την εξακρίβωση της αυθεντικότητας και την εγκυρότητα κάθε απαραίτητου αποδεικτικού έγγραφου.
- 2 Πιστοποιητικά που εκδίνονται σύμφωνα με τις διατάξεις των κανονισμών V/1-1 και V/1-2, σε πλαιάρχους και αξιωματικούς θα εκδίνονται μόνο από μία Αρχή.
- 3 Τα πιστοποιήτικά θα είναι στην επίσημη γλώσσα ή γλώσσες της χώρας που τα εξέδωσε. Εάν η γλώσσα που χρησιμοπαείται δεν είναι η Αγγλική, το κείμενο θα περιλαμβάνει μετάφραση σε αυτή την γλώσσα.
- 4 Όσον αφορά τους χειριστές ραδιοεπικανωνιών τα Μέρη μπορούν:

- .1 να περιλαμβάνουν τις πρόσθετες γνώσεις που απαιτούνται από τους σχετικούς κανονισμούς, στις εξετάσεις για την απόκτηση πιστοποιητικού σύμφωνα με τους Κανονισμούς Ραδιοεπικανωνιών, ή
- .2 να εκδίδουν ξεχωριστό πιστοπαιητικό στο οποίο θα εμφαίνεται ότι ο κάτοχός του έχει τις πρόσθετες γνώσεις που απαιτούνται από τους σχετικούς κανονισμούς
- 5 Η θεώρηση που απαιτείται από το άρθρο VI της Σύμβασης για επιβεβαίωση έκδοσης του πιστοποιητικού θα γίνεται μόνο αν πληρούνται όλες οι απαιτήσεις της Σύμβασης.
- 6 Κατά την κρίση του Μέρους, οι θεωρήσεις μπορούν να περιλαμβάνονται στα εκδιδόμενα πιστοποιητικά όπως προβλέπεται στο τμήμα Α-Ι/2 του Κώδικα STCW. Εάν η θεώρηση ενσωματώνεται κατ' αυτό τον τρόπο ο τύπος πιστοποιητικού που χρησιμοπαιείται θα είναι αυτός που καθορίζεται στο τμήμα Α-Ι/2 παράγραφος 1. Εάν η θεώρηση γίνει με διαφορετικό τρόπο, ο χρησιμοποιούμενος τύπος θα είναι αυτός που καθορίζεται στην παράγραφο 2 του τμήματος Α-Ι/2.
- 7 Αρχή που αναγνωρίζει πιστοπαιητικό σύμφωνα με τον κανονισμό Ι/10:
  - .1 πιστοποιητικό ικανότητας, ή
  - .2 πιστοποιητικό επάρκειας που εκδίδεται στους πλοιάρχους και αξιωματικούς σύμφωνα με τις διατάξεις των κανονισμών V/ 1-1 και V/ 1-2 θα θεωρείται το πιστοποιητικό που βεβαιώνει την αναγνώριση μόνο αφού διασφαλιστεί η αυθεντικότητα και η εγκυρότητα του πιστοποιητικού.
- Η θεώρηση θα εκδίδεται μόνο εάν πληρούνται όλες οι απαιτήσεις της Σύμβασης. Ο τύπος της θεώρησης θα είναι αυτός που καθορίζεται στην παράγραφο 3 του μέρους Α-ί/2 του Κώδικα STCW.
- 8 Οι θεωρήσεις που μνημονεύονται στις παραγράφους 5, 6 και 7:
  - .1 μπορεί να εκδίδονται ως ξεχωριστά έγγραφα,
  - .2 θα εκδίδονται μόνο από την Αρχή,
  - .3 σε κάθε μία θα δίνεται ένας μοναδικός αριθμός, εκτός εκείνων των θεωρήσεων που επιβεβαιώνουν την έκδοση πιστοπαιτικού οπότε μπορεί να έχουν τον ίδιο αριθμό με το σχετικό πιστοποιητικό, με την προϋπόθεση ότι ο αριθμός είναι μοναδικός, και
  - .4 η θεώρηση θα λήγει μαζί με το πιστοποιητικό που θεωρήθηκε ή όταν αυτό αποσύρεται, αναστέλλεται ή ακυρώνεται από το Μέρος που το εξέδωσε, και σε καμία περίπτωση δεν θα ισχύει περισσότερο από πέντε χρόνια από την ημερομηνία έκδοσης.
- 9 Η ιδιότητα με την οποία ο κάτοχος του πιστοποιητικού επιτρέπεται να υπηρετεί θα αναφέρεται στη θεώρη--ση, με τον ίδιο τρόπο που αυτή αναφέρεται στις ισχύουσες απαιτήσεις ασφαλούς επάνδρωσης από την Αρχή.
- 10 Οι Αρχές μπορούν να χρησιμοπαιήσουν τύπο διαφορετικό από εκείνον που δίνεται στο μέρος Α-Ι/2 του Κώδικα STCW με την προϋπόθεση ότι κατ' ελάχιστον οι απαιτούμενες πληροφορίες δίνονται με Λαπνικούς χαρακτήρες και Αραβικούς αριθμούς, λαμβάνοντας υπόψη τις μεταβολές που επιτρέπονται στο μέρος Α-Ι/2.
- 11 Σύμφωνα με τις διατάξεις του κανονισμού I/10 παράγραφος 5, το πρωτότυπο κάθε απαιτουμένου από την Σύμβαση πιστοπαιητικού πρέπει να είναι διαθέσιμο στο πλοίο που υπηρετεί ο κάτοχός του.
- 12 Κάθε Μέρος θα βεβαιώνει ότι πιστοπαιητικά εκδίνονται μόνο στους υποψηφίους που πληρούν τις απαιτήσεις αυτού του κανονισμού.
- 13 Οι υποψήφιαι για πιστοποίηση θα παρέχουν ικανοπαιητικά αποδεικτικά σταιχεία:
  - .1 της ταυτότητας τους,
  - .2 όπ η ηλικία τους δεν είναι μικρότερη από αυτή που ορίζει ο σχεπκός με το αιτούμενο πιστοπαιητικό κανονισμός,
  - .3 ότι ανταποκρίνονται στα πρότυπα καταλληλότητας απότατρικής άποψης όπως καθορίζονται στο τμήμα Α-1/ 9 του Κώδικα STCW,

- .4 ότι έχουν ολοκληρώσει τη θαλάσσια υπηρεσία και κάθε σχετκή υποχρέωτικη εκπαίδευση, που απαιτείται από τους κανονισμούς για το αιτούμενο πιστοποιητικό, και
- .5 ότι ανταποκρίνονται στα πρότυπα καταλληλότητας που ορίζονται από αυτούς τους κανονισμούς για τις ικανότητες, τις λειτουργίες και τα επίπεδα που πρέπει να προσδιόριζονται στη θεώρηση του πιστοπαιητικού.
- 14 Κάθε Μέρος αναλαμβάνει την υποχρέωση να διατηρεί μητρώο ή μητρώα όλων των πιστοπαιητικών και θεωρήσεων των πλαάρχων, αξιωματικών και κατά περίπτωση, μελών πληρώματος, που εκδίνονται, έχουν λήξει ή έχουν ανανεωθεί, ανασταλλεί, ακυρωθεί ή έχει δηλωθεί απώλεια ή καταστροφή τους, καθώς και των εκδιδόμενων εξαιρέσεων.
- 15 Κάθε Μέρος αναλαμβάνει την υποχρέωση να διαθέτει πληροφορίες σχετικά με το καθεστώς τέτσων πιστοποιητικών καταλληλότητας, θεωρήσεων και εξαιρέσεων, σε άλλα Μέρη και εταιρείες, οι οποίες ζητούν εξακρίβωση της αυθεντικότητας και εγκυρότητας των πιστοποιητικών που κατατίθενται σε αυτούς από ναυτικούς, που αναζητούν αναγνώριση των πιστοποιητικών τους σύμφωνα με τον κανονισμό 1/10 ή εργασία επί πλοίου.
  - 16. Από την 1<sup>η</sup> Ιανουαρίου του 2017, οι πληροφορίες σχετικά με το καθεστώς πληροφοριών που απαιτούνται να είναι διαθέσιμες σύμφωνα με την παράγραφο 15 αυτού του κανονισμού, θα έιναι διαθέσιμες στην Αγγλική γλώσσα μέσω ηλεκτρονικών μέσων.

# Κανονισμός 1/3

Αρχές που διέπουν παράκτιους πλόες

- 1 Οποιοδήποτε Μέρος ορίζει παράκπους πλόες για το σκοπό της Σύμβασης, δεν θα επιβάλλει σε ναυτικούς που υπηρετούν σε πλοία που φέρουν τη σημαία άλλου Μέρους και εκτελούν τέτσια ταξίδια, απαιτήσεις εκπαίδευσης, εμπειρίας ή πιστοποίησης κατά τρόπο που να οδηγεί σε αυστηρότερες απαιτήσεις για αυτούς τους ναυτικούς από τους ναυτικούς που υπηρετούν σε πλοία που φέρουν την δική του σημαία. Σε καμία περίπτωση Μέρος δεν θα επιβάλλει απαιτήσεις σε ναυτικούς που υπηρετούν σε πλοία που φέρουν τη σημαία άλλου Μέρους μεγαλύτερες εκείνων της Σύμβασης για πλοία που δεν εκτελούν παράκτιους πλόες.
- 2 Ένα Μέρος που παρέχει στα πλοία τα οφέλη των διατάξεων της Σύμβασης περί παράκτων πλόων, που περιλαμβάνουν πλόες κοντά στις ακτές άλλων Μερών εντός των ορίων του ορισμού τους περί παράκτων πλόων, θα συνάπτει συμφωνία με τα ενδιαφερόμενα Μέρη, καθορίζοντας τις λεπτομέρειες των δυο εμπλεκόμενων εμπορικών περιοχών και άλλων σχετικών συνθηκών.
- 3 Όσον αφορά τα πλοία που φέρουν την σημαία ενός Μέρους και εκτελούν τακτικούς παράκτιους πλόες κοντά σε ακτές άλλου Μέρους, το Μέρος τη σημαία του οποίου φέρει το πλοίο θα καθορίσει απαιτήσεις εκπαίδευσης, εμπειρίας και πιστοποίησης για ναυτικούς που υπηρετούν σε τέτσια πλοία τουλάχιστον ίσα με αυτά του Μέρους στις ακτές του οποίου κινείται το πλοίο, με την προϋπόθεση ότι αυτές δεν υπερβαίνουν τις απαιτήσεις της Σύμβασης για πλοία που δεν εκτελούν παράκτιους πλόες. Ναυτικοί που υπηρετούν σε πλοίο που επεκτείνει τους πλόες του πέραν αυτού που ορίζεται ως παράκτιος πλους από ένα Μέρος, και εισέρχεται σε περιοχές που δεν καλύπτονται από τον ορισμό του παράκτιου πλου, θα πρέπει να καλύπτουν τις αντίσταιχες απαιτήσεις ικανότητας της Σύμβασης.
- 4 Ένα Μέρος μπορεί να επεκτείνει την ισχύ, τις διατάξεις περί παρακτίων πλόων, σε πλοίο που φέρει την σημαία του, όταν αυτό εκτελεί τακτικούς πλόες κοντά στις ακτές ενός μη Μέρους, όπως αυτοί ορίζονται από το Μέρος.
- 5 Τα πιστοπαιητικά των ναυτικών που εκδίνονται από ένα Μέρος για τα καθορισμένα όρια περί παράκτιων πλόων μπορούν να γίνονται δεκτά από άλλα Μέρη για την υπηρεσία εντός των καθορισμένων ορίων παράκτιων πλόων, με την προυπόθεση ότι τα ενδιαφερόμενα Μέρη θα συνάπτουν συμφωνία διευκρινίζοντας τις λεπτομέρειες των εμπλεκόμενων εμπορικών χώρων και των σχετικών συνθηκών τους.
- 6 Τα Μέρη που ορίζουν παράκπους πλόες, σύμφωνα με τις απαιτήσεις αυτού του Κανονισμού, θα:
  - .1 πληρούν τις αρχές που διέπουν τους παράκτιους πλόες που καθορίζονται στο τμήμα Α-Ι/3,
  - .2 ανακανώνουν στο Γενικό Γραμματέα, σύμφωνα με τις απαιτήσεις του κανονισμού 1/7, τις λεπτομέρειες των διατάξεων που έχουν υιοθετήσει, και

- .3 θα ενσωματώνουν τα όρια των παράκτιων πλόων στις θεωρήσεις που εκδίνονται δυνάμει του κανονισμού Ι/2,παράγραφοι 5, 6 ή 7.
- 7 Τίποτα σε αυτό τον κανονισμό δεν μπορεί να θέσει καθ' σιονδήποτε τρόπο περιορισμούς στην δικαιοδοσία οποιουδήποτε Κράτους, είτε αυτό είναι Μέρος της Σύμβασης είτε όχι.

### Κανονισμός 1/4

Διαδικασίες ελέγχου

- 1 Ο έλεγχος που ασκείται από κατάλληλα εξουσιοδοτημένο αξιωματικό σύμφωνα με το άρθρο Χ θα περιορίζεται στα ακόλουθα:
  - . 1 στην εξακρίβωση σύμφωνα με το άρθρο Χ(1) όπ όλα οι ναυτικοί που υπηρετούν στο πλοίο, που απαιτείται να έχουν πιστοπαιητικά σύμφωνα με την Σύμβαση, είναι κάτοχαι κατάλληλου πιστοπαιητικού ή εξαίρεσης που είναι σε ισχύ ή παρουσιάζουν έγγραφα αποδεικτικά σταιχεία από τα οποία προκύπτει όπ έχουν υποβάλλει αίτηση για χορήγηση θεώρησης στην Αρχή σύμφωνα με τον κανονισμό 1/10, παράγραφο 5.
  - .2 στην εξακρίβωση ότι ο αριθμός και τα πιστοποιητικά των ναυτικών που υπηρετούν στο πλοίο είναι σύμφωνα με τις ισχύουσες απαιτήσεις ασφαλούς επάνδρωσης που καθορίζονται από την Αρχή, και
  - .3 στην αξιολόγηση της ικανότητας των ναυτικών του πλοίου, σύμφωνα με το τμήμα Α-1/4 του Κώδικα STCW, να διατηρούν επίπεδο τήρησης φυλακής και πρότυπα προστασίας (seurity), κατά περίπτωση, όπως απαιτείται από τη Σύμβαση, εάν υπάρχουν σαφείς λόγοι όπι αυτό το επίπεδο δεν εξασφαλίζεται επειδή έχει συμβεί οποιοδήποτε από τα παρακάτω:
    - .3.1 το πλοίο έχει εμπλακεί σε σύγκρουση, προσάραξη ή έχει εξωκείλει ή
    - .3.2 υπήρξε απόρριψη υλικών από το πλοίο κατά τον πλου, στο αγκυροβόλιο ή όταν είναι παραβεβλημένο, η οποία είναι παράνομη σύμφωνα με οποιαδήποτε διεθνή σύμβαση, ή
    - .3.3 το πλοίο έκανε ελιγμούς κατά τρόπο αντικανονικό ή ανασφαλή, χωρίς να τηρούνται συνήθη μέτρα που έχουν γίνει αποδεκτά από τον Οργανισμό ή δεν τηρούνται ασφαλείς πρακτικές και διαδικασίες ναυσιπλοΐας, ή
    - .3.4 το πλοίο διακυβερνάται κατά τέτοιο τρόπο που ενδεχομένως θα προξενήσει κίνδυνο σε πρόσωπα, στην περιουσία, στο περιβάλλον ή συμβιβασμό στην προστασία (security).
- 2 Ελλείψεις που μπορεί να θεωρηθούν ότι θα προκαλέσουν κίνδυνο για άτομα, περιουσία ή το περιβάλλον περιλαμβάνουν τα παρακάτω:
  - .1 έλλειψη κατοχής από μέρους των ναυτικών πιστοπαιτικού, έλλειψη κατοχής κατάλληλου πιστοπαιτικού, έγκυρης εξαίρεσης ή αδυναμία τους να παρουσιάσουν αποδεκτικά σταχεία ότι έχει υποβληθεί στην Αρχή αίτηση για θεώρηση σύμφωνα με τον κανονισμό Ι/10 παράγραφο 5,
  - .2 αδυναμία συμμόρφωσης με τις ισχύουσες απαιτήσεις της Αρχής περί ασφαλούς επάνδρωσης,
  - .3 έλλειψη ρυθμίσεων τήρησης φυλακής γέφυρας ή μηχανοστασίου σύμφωνα με τις απαιτήσεις που καθορίζονται από την Αρχή για το πλοίο,
  - .4 απουσία στην φυλακή ατόμου που διαθέτει προσόντα χειρισμού του εξοπλισμού που είναι ουσιώδης για την ασφαλή ναυσιπλοΐα, ασφάλεια ραδιοεπικαινωνιών ή την πρόληψη θαλάσσιας ρύπανσης, και
  - .5 ανικανότητα κατά την έναρξη του πλου να προβλέπει για την πρώτη φυλακή και για επακόλουθες φυλακές, πρόσωπα που έχουν επαρκώς αναπαυθεί και σε κάθε περίπτωση είναι ικανά να αναλάβουν καθήκοντα.

3 Ο μοναδικός λόγος κράτησης του πλοίου, σύμφωνα με το άρθρο Χ, είναι η διαπίστωση, από το Μέρος που διενεργεί τον έλεγχο, αδυναμίας του πλοίου να αποκαταστήσει οποιαδήποτε από τις ελλείψεις που μνημονεύονται στην παράγραφο 2 και που αποτελούν κίνδυνο για πρόσωπα, την περιουσία ή το περιβάλλον.

# Κανονισμός 1/5

Εθνικές διατάξεις

- 1 Κάθε Μέρος θα θεσπίσει διαδικασίες και μεθόδους για την αμερόληπτη διερεύνηση οποιασδήποτε ανεπάρκειας, πράξης ή παράλειψης, που ενδεχόμενα θα αποτελέσει άμεση απειλή της ασφάλειας της ζωής ή περουσίας στην θάλασσα ή στο θαλάσσιο περιβάλλον, από κατόχους πιστοποιητικών ή θεωρήσεων που εκδόθηκαν από αυτό το Μέρος και που αφορούν την εκτέλεση καθηκόντων που σχετίζονται με τα πιστοποιητικά τους, και για την απόσυρση, αναστολή και ακύρωση τέτοιων πιστοποιητικών για τέτοιους λόγους καθώς και για την πρόληψη απάτης.
- 2 Κάθε Μέρος θα πάρει και θα επιβάλλει τα κατάλληλα μέτρα για την πρόληψη απάτης και άλλων παράνομων πρακτικών που σχετίζονται με τα πιστοποιητικά και τις θεωρήσεις που εκδίνονται.
- 3 Κάθε Μέρος θα θεσπίσει ποινές ή πειθαρχικά μέτρα για πλοία που φέρουν την σημαία του ή για ναυτικούς που διαθέτουν πιστοποιητικά αυτού του Μέρους, σε περίπτωση που δεν τηρούνται οι διατάξεις της εθνικής του νομοθεσίας, που θέτουν σε ισχύ την Σύμβαση.
- 4 Συγκεκριμένα, τέταιες παινές ή πειθαρχικά μέτρα θα καθορίζονται και εφαρμόζονται σε περιπτώσεις που:
  - .1 εταιρεία ή πλοίαρχος προσλαμβάνουν άτομο που δεν διαθέτει πιστοποιητικό που απαιτείται από τη Σύμβαση,
  - .2 πλοίαρχος επέτρεψε οπαιαδήποτε λειτουργία ή υπηρεσία με οπαιαδήποτε ειδικότητα που απαιτείται από αυτούς τους κανονισμούς να εκτελείται από άτομο που διαθέτει το κατάλληλο πιστοπαιητικό και να εκτελείται από άτομο που δεν κατέχει το απαιτούμενο πιστοπαιητικό ή εξαίρεση σε ισχύ ή δεν έχει τα αποδεικτικά στοιχεία που απαιτούνται σύμφωνα με τον κανονισμό Ι/10 παράγραφο 5, ή
  - 3 άτομο πέτυχε, με απάτη ή πλαστογραφημένα έγγραφα, πρόσληψη μέσω της οποίας εκτελεί οποιαδήποτε λειτουργία ή υπηρετεί υπό οποιαδήποτε ειδικότητα, η οποία απατείται από αυτούς τους κανονισμούς να εκτελείται από άτομο που διαθέτει κατάλληλο πιστοποιητικό ή εξαίρεση.
- 5 Κάθε Μέρος, στην επικράτεια του οποίου λειτουργεί οπαιαδήποτε εταιρία ή άτομο που θεωρούνται, με βάση σαφείς αποδείξεις, ότι είναι υπεύθυναι ή είναι γνώστες οπαιασδήποτε εμφανούς μη συμμόρφωσης με την Σύμβαση που προβλέπεται στην παράγραφο 4, θα συνεργάζεται με κάθε τρόπο με οποιοδήποτε Μέλος το ενημερώνει για τις προθέσεις του να αρχίσει διαδικασίες κατά την δικαιοδοσία του.

### Κανονισμός 1/6

Εκπαίδευση και αξιολόγηση

Κάθε Μέρος θα εξασφαλίσει ότι:

- . 1 η εκτιαίδευση και αξιολόγηση των ναυτικών όπως απαιτούνται από την Σύμβαση, διοικείται, εποπτεύεται και παρακολουθείται σύμφωνα με τις διατάξεις του μέρους Α-Ι/6 του Κώδικα της STCW, και
- .2 α υπεύθυνα για την εκπαίδευση των ναυτικών και την αξιολόγηση της ικανότητας τους, όπως απαιτούνται σύμφωνα με την Σύμβαση, διαθέτουν τα κατάλληλα προσόντα σύμφωνα με τις διατάξεις του μέρους Α-Ι/6 του Κώδικα STCW για τον αντίσταιχο τύπο και επίπεδο εκπαίδευσης ή αξιολόγησης.

### Κανονισμός 1/7

Μετάδοση πληροφοριών

1 Εκτός από τις πληροφορίες που απαιτείται να ανακαινώνονται σύμφωνα με το άρθρο IV, κάθε Μέρος θα υποβάλλει στον Γενικό Γραμματέα, εντός των χρονικών προθεσμιών που προσδιορίζονται, και στον τύπο που καθορίζεται στο τμήμα Α-Ι/7 του Κώδικα STCW, οποιεσδήποτε άλλες πληροφορίες, που ενδεχομένως απαιτούνται από τον Κώδικα, για άλλα μέτρα που λαμβάνονται από το Μέρος, προκειμένου να εφαρμοσθεί πλήρως και ορθά η Σύμβαση.

- 2 Όταν ολοκληρωμένες πληροφορίες, όπως καθορίζονται στο άρθρο IV και στο τμήμα Α-Ι/7 του Κώδικα STCW έχουν ληφθεί και επιβεβαιώνεται απόλυτα από αυτές η πλήρης και τέλεια εφαρμογή των διατάξεων της Σύμβασης, ο Γενικός Γραμματέας θα υποβάλει σχετική αναφορά στην Επιτροπή Ναυτικής Ασφάλειας.
- 3 Ύστερα από επακόλουθη επιβεβαίωση από την Επιτροπή Ναυτικής Ασφάλειας, σύμφωνα με διαδικασίες που υιοθετούνται από την Επιτροπή, ότι οι πληροφορίες που έχουν δοθεί καταδεικνύουν πλήρη και ορθή εφαρμογή των διατάξεων της Σύμβασης:
  - .1 η Επιτροπή Ναυτικής Ασφάλειας ορίζει τα ενδιαφερόμενα Μέρη,
  - .2 επανεξετάζει τη λίστα των Μερών, που ανακοίνωσαν τις πληροφορίες που καταδεικνύουν πλήρη και ορθή εφαρμογή των σχετικών διατάξεων της Σύμβασης, ώστε να παραμείνουν στη λίστα μόνο τα ενδιαφερόμενα Μέρη,
  - .3 άλλα Μέρη θα δικαιούνται, σύμφωνα με τις διατάξεις των κανονισμών Ι/4 και Ι/10 να αποδεχθούν κατ' αρχήν, ότι τα πιστοποιητικά που εκδόθηκαν από ή για λογαριασμό των αναφερομένων Μερών στην παράγραφο 3.1, συμμορφώνονται με την Σύμβαση.
- 4 Τροποποιήσεις της Σύμβασης και του Κώδικα STCW, με ημερομηνίες έναρξης ισχύος μεταγενέστερες της ημερομηνίας που ανακανώθηκαν οι πληροφορίες στο Γενικό Γραμματέα, ή θα ανακανωθούν, σύμφωνα με τις διατάξεις της παραγράφου 1, δεν υπόκεινται στις διατάξεις του μέρους Α-Ι/7, παράγραφοι 1 και 2.

# Κανονισμός 1/8

Πρότυπα ποιότητας

- 1 Κάθε Μέρος θα εξασφαλίσει όπ:
  - 1 σύμφωνα με τις διατάξεις του τμήματος Α-Ι/8 του Κώδικα STCW, η εκπαίδευση, αξιολόγηση ικανότητας, πιστοποίηση, συμπεριλαμβανομένης της ιατρικής πιστοποίησης, θεώρησης και διαδικασίες ανανέωσης που πραγματοπαιούνται από μη κυβερνητικούς φορείς ή οργανώσεις, με την εξουσιοδότηση της Αρχής, θα επιτηρούνται συνεχώς μέσω ενός συστήματος προτύπων παιότητος για να εξασφαλισθεί η επίτευξη των προσδιορισμένων αντικειμενικών σκοπών, περιλαμβανομένων και αυτών που αφορούν τα προσόντα και την εμπειρία των εκπαιδευτών και βαθμολογητών, και
  - .2 όπου κυβερνητικοί φορείς ή οργανώσεις πραγματοποιούν τέτοιες δραστηριότητες θα υπάρχει σύστημα εξασφάλισης των προτύπων ποιότητας.
- 2 Κάθε Μέρος θα εξασφαλίζει επίσης ότι πραγματοποιείται περιοδική αξιολόγηση σύμφωνα με τις διατάξεις του μέρους Α Ι/8 του Κώδικα STCW από προσοντούχαι άτομα, που δεν εμπλέκονται στις εν λόγω δραστηριότητες. Αυτή η αξιολόγηση θα περιλαμβάνει όλες τις αλλαγές των εθνικών κανονισμών και διαδικαστών σύμφωνα με τις τροποπαιήσεις της Σύμβασης και του Κώδικα STCW, με ημερομηνίες έναρξης ισχύος μεταγενέστερες της ημερομηνίας που ανακοινώθηκε στο Γενικό Γραμματέα.
- 3 Η αναφορά που θα περιέχει τα αποτελέσματα της αξιολόγησης που απαιτούνται από την παράγραφο 2 θα ανακοινώνονται στο Γενικό Γραμματέα, σύμφωνα με τη μορφή που ορίζεται στο τμήμα Α-Ι/7 του Κώδικα STCW.

# Κανονισμός 1/9

Ιατρικά πρότυπα

- 1 Κάθε Μέρος θα θεσπίσει πρότυπα υγειονομικής καταλληλότητας για τους ναυτικούς και διαδικασίες για την έκδοση ενός ιατρικού πιστοποιητικού σύμφωνα με τις διατάξεις αυτού του κανονισμού και του τμήματος Α-Ι/9 του Κώδικα STCW.
- 2 Κάθε Μέρος θα εξασφαλίσει ότι α υπεύθυναι για την αξιολόγηση της υγειονομικής καταλληλότητας των ναυτικών, είναι γιατροί αναγνωρισμένα από το Μέρος, με σκοπό να εκτελούν τις ιατρικές εξετάσεις των ναυτικών, σύμφωνα με τις διατάξεις του τμήματος Α-Ι/9 του Κώδικα STCW.
- 3 Κάθε ναυτικός που υπηρετεί στη θάλασσα και είναι κάτοχος πιστοποιητικού που εκδίδεται σύμφωνα με τις διατάξεις της Σύμβασης, θα πρέπει επίσης να έχει σε ισχύ ένα τατρικό πιστοποιητικό που εκδίδεται σύμφωνα με τις διατάξεις αυτού του κανονισμού και του τμήματος Α-Ι/9 του κώδικαι STCW.

- 4 Κάθε υποψήφιος για πιστοποίηση, θα πρέπει:
  - .1 να μην είναι μικρότερος από 16 ετών,
  - .2 να παρέχει ικανοποιητικά αποδεικτικά στα χεία της ταυτότητας του/ της, και
  - .3 να πληροί τα πρότυπα υγειονομικής καταλληλότητας που θεαπίζονται από το Μέρος.
- 5 Τα ιατρικά πιστοποιητικά θα παραμένουν σε ισχύ με μέγιστη διάρκεια τα δύο χρόνια ,εκτός και αν ο ναυτικός είναι κάτω από 18 ετών, σε αυτή την περίπτωση η μέγιστη περίοδος ισχύος θα είναι ένας χρόνος.
- 6 Αν η περίοδος ισχύος ενός ιστρικού πιστοπαητικού λήγει κατά τη διάρκεια ενός πλου, τότε το ιστρικό πιστοπαιητικό θα συνεχίσει να είναι σε ισχύ μέχρι τον επόμενο λιμένα κατάπλου όπου βρίσκεται ένας διαθέσιμος ιστρός αναγνωρισμένος από το Μέρος με την προϋπόθεση ότι η περίοδος δεν θα υπερβεί τους τρεις μήνες.
- 7 Σε επείγουσες περιπτώσεις η Αρχή μπορεί να επιτρέψει σ' ένα ναυτικό να δουλεύει χωρίς να είναι το ιατρικό ποτοποιητικό σε ισχύ μέχρι τον επόμενο λιμένα κατάπλου, όπου υπάρχει διαθέσιμος ιατρός αναγνωρισμένος από το Μέρος, με την προϋπόθεση ότι:
  - .1 η περίοδος αυτής της άδειας δεν ξεπερνάει τους τρεις μήνες, και
  - .2 ο ενδιαφερόμενος ναυτικός έχει στην κατοχή του ένα ληγμένο ιατρικό πιστοποιητικό πρόσφατης ημερομηνίας.

# Κανονισμός Ι/10

Αναγνώριση πιστοποιητικών

- 1 Κάθε Αρχή θα εξασφαλίζει ότι οι διατάξεις αυτού του κανονισμού τηρούνται προκειμένου να αναγνωρίσει με θεώρηση, σύμφωνα με τον κανονισμό 1/2 παράγραφος 7, πιστοπιστητικό που εκδόθηκε από ή υπό την αρχή άλλου Μέρους σε πλοίαρχο, αξιωματικό ή χειριστή ραδιοεπικανωνιών και ότι:
  - .1 η Αρχή έχει επιβεβαιώσει, μέσω αξιολόγησης αυτού του Μέρους, η οποία μπορεί να περιλαμβάνεται επιθεώρηση των εγκαταστάσεων και διαδικασιών, ότι οι απαιτήσεις της Σύμβασης που αφορούν τα πρότυπα ικανότητας, την εκπαίδευση και πιστοποίηση και τα πρότυπα ποιότητας τηρούνται απόλυτα, και
  - .2 έχει συμφωνηθεί με το ενδιαφερόμενο Μέρος όπ θα παρέχεται έγκαιρη προειδοποίηση όσον αφορά σημαντικές αλλαγές στις ρυθμίσεις εκπαίδευσης και πιστοποίησης που προβλέπονται σύμφωνα με την Σύμβαση.
  - 2 Θα θεσπιστούν μέτρα με τα οποία θα εξασφαλίζεται ότι α ναυτικοί που προσκομίζουν για αναγνώριση πιστοπαιητικά που εκδόθηκαν σύμφωνα με τις διατάξεις των κανονισμών—ΙΙ/2, ΙΙΙ/2 ή ΙΙΙ/3 ή εκδόθηκαν σύμφωνα με τον κανονισμό VII/1 σε διακητικό επίπεδο, όπως ορίζεται στον Κώδικα STCW, γνωρίζουν την ναυτική νομοθεσία, της Αρχής που είναι υπεύθυνη για τα καθήκοντα που τους επιτρέπεται να εκτελούν.
  - 3 Οι πληροφορίες που δίνονται και τα μέτρα που έχουν συμφωνηθεί με αυτόν τον κανονισμό θα ανακανώνονται στο Γενικό Γραμματέα σύμφωνα με τις απαιτήσεις του κανονισμού 1/7.
  - 4 Τα πιστοπαιητικά που εκδόθηκαν από ή υπό την αρχή ενός μη Μέρους δεν θα αναγνωρίζονται.
  - 5 Παρά την απαίτηση του κανονισμού I/2, παράγραφος 7, μια Αρχή μπορεί, αν οι συνθήκες το απαιτούν, με την επιφύλαξη των διατάξεων της παραγράφου 1, να επιτρέψει σε ναυτικό να υπηρετήσει, για χρονικό διάστημα όχι μεγαλύτερο των τριών μηνών σε πλοίο που φέρει την σημαία της, εάν διαθέτει κατάλληλο και ισχύσιν ποτοποιητικό που εκδόθηκε και θεωρήθηκε, όπως απαιτείται, από άλλο Μέρος για χρήση σε πλοία αυτού του Μέρους, αλλά που δεν έχει ακόμη θεωρηθεί ώστε να καταστεί κατάλληλο για υπηρεσία σε πλοία που διακαιούνται να φέρουν την σημαία της Αρχής. Τα αποδεικτικά στοιχεία θα είναι άμεσα διαθέσιμα όσον αφορά την κατάθεση αίτησης στην Αρχή για την έκδοση θεώρησης.
  - 6 Τα πιστοποιητικά και οι θεωρήσεις που εκδίδονται από Αρχή, σύμφωνα με τις διατάξεις αυτού του κανονσμού, για την αναγνώριση πιστοποιητικού ή που επιβεβαιώνουν την αναγνώριση πιστοποιητικού που εκδόθηκε από άλλο Κράτος μέλος, δεν θα χρησιμοποιούνται σαν βάση για περαιτέρω αναγνώριση από άλλη Αρχή.

# Κανονισμός //11

Επανεπικύρωση πιστοποιητικών

- 1 Κάθε πλοίαρχος, αξιωματικός και χειριστής ραδιοεπικανωνιών που είναι κάτοχος πιστοπαιητικού που εκδόθηκε ή αναγνωρίστηκε σύμφωνα με οποιοδήποτε κεφάλαιο αυτής της Σύμβασης, εκτός του κεφαλαίου VI, που υπηρετεί σε πλοίο ή προτίθεται να επιστρέψει σε θαλάσσια υπηρεσία ύστερα από κάποιο χρονικό διάστημα που διήνυσε στην ξηρά, για να συνεχίσει να έχει προσόντα για θαλάσσια υπηρεσία, θα απαιτείται κατά διαστήματα που δεν θα υπερβαίνει το κάθε ένα τα πέντε έτη κάθε φορά να:
  - 1. πληροί τα πρότυπα Ιατρικής καταλληλότητας που ορίζονται από τον κανονισμό 1/9, και
  - 2. αποδεικνύει συνεχιζόμενη επαγγελματική ικανότητα σύμφωνα με το τμήμα Α-Ι/11 του Κώδικα STCW.
- 2 Κάθε πλοίαρχος, αξιωματικός και χειριστής ραδιοεπικανωνιών για να συνεχίσει θαλάσσια υπηρεσία σε πλοία για τα οποία έχουν δεθνώς συμφωνηθεί ειδικές απαιτήσεις εκπαίδευσης θα έχει ολοκληρώσει με επιτυχία εγκεκριμένη σχετική εκπαίδευση.
- 3 Κάθε πλοίαρχος και αξιωματικός, για συνεχόμενη θαλάσσια υπηρεσία σε δεξαμενόπλαια, θα πρέπει να πληροί τις απαιτήσεις της παραγράφου 1 αυτού του κανονισμού και απαιτείται για να θεμελιώσει συνεχόμενη επαγγελματική ικανότητα σε δεξαμενόπλαια, τα διαλείμματα να μην ξεπερνούν τα πέντε χρόνια, σύμφωνα με το τμήμα Α-Ι/11, παράγραφο 3 του Κώδικα STCW.
- 4 Κάθε Μέρος θα συγκρίνει τα πρότυπα κανότητας που απαιτούσε από υποψηφίους για πιστοπαιητικά που εκδόθηκαν πριν την 1η Ιανουαρίου 2017 με εκείνα που καθορίζονται για το αντίσταχο πιστοπαιητικό στο μέρος Α του Κώδικα STCW και θα προσδιορίσει την ανάγκη να ζητήσει από τους κατόχους τέταιων πιστοπαιητικών να υποστούν κατάλληλη εκπαίδευση ανανέωσης και εκσυγχρονισμού των γνώσεών τους ή αξιολόγηση.
- 5 Το Μέρος, σε συνεργασία με τους ενδιαφερόμενους, θα εκπονήσει ή θα προάγει την οργάνωση κύκλων σπουδών επιμόρφωσης για ανανέωση και εκσυγχρονισμό των γνώσεων όπως προβλέπεται στο τμήμα Α-Ι/11 του Κώδικα STCW.
- 6 Με σκοπό τον εκσυγχρονισμό των γνώσεων πλαιάρχων, αξιωματικών και χειριστών ραδιοεπικαινωνιών, κάθε Αρχή θα εξασφαλίσει ότι τα κείμενα των πρόσφατων αλλαγών στους εθνικούς και διεθνείς κανονισμούς που αφορούν την ασφάλεια της ζωής στην θάλασσα προστασία (security) και την προστασία του θαλάσσιου περιβάλλοντος, είναι στην διάθεση των πλοίων που φέρουν την σημαία της.

# Κανονισμός Ι/12

Χρήση προσομοιωτών

- 1. Τα πρότυπα λειτουργίας και άλλες διατάξεις που αναφέρονται στο τμήμα Α-Ι/12, καθώς και άλλες απαιτήσεις όπως μνημονεύονται στο μέρος Α του Κώδικα STCW, για οποιοδήποτε σχετικό πιστοποιητικό, θα τηρούνται ως προς:
  - .1 όλη την υποχρεωτική εκπαίδευση που βασίζεται σε προσομαιωτή,
  - .2 όπαια αξιολόγηση ικανότητας απαιτείται από το μέρος Α του Κώδικα. STCW, και πραγματοπαιείται χρησιμοπαιώντας προσομαιωτή και
  - .3 όποια επίδειξη συνεχούς ικανότητας, χρησιμοποιώντας προσομοιωτή, που απαιτείται από το μέρος Α του Κώδικα STCW.

# Κανονισμός Ι/13

Πραγματοποίηση δοκιμών

- 1 Οι κανονισμοί αυτοί δεν θα εμποδίζουν την Αρχή να εξουσιοδοτεί πλοία, που φέρουν τη σημαία της, να συμμετέχουν σε δοκιμές.
- 2 Για τους σκοπούς αυτούς του κανονισμού ο όρος "δοκιμή" σημαίνει πείραμα ή σειρά πειραμάτων που πραγματοποιούνται σε μία περιορισμένη χρονική περίοδο, και που μπορεί να περιλαμβάνουν την χρήση αυτοματοποιημένων ή ολοκληρωμένων συστημάτων προκειμένου να αξιολογηθούν εναλλακτικές μέθοδα εκτέ-

λεσης συγκεκριμένων καθηκόντων ή ικανοποίησης ειδικών ρυθμίσεων,που ορίζονται από την Σύμβαση, και που θα παρέχουν τουλάχιστον τον αυτό βαθμό ασφάλειας και πρόληψης ρύπανσης όπως προβλέπεται από αυτούς τους κανογισμούς.

- 3 Η Αρχή που εξουσιοδοτεί πλοία να λάβουν μέρος σε δοκιμές θα βεβαιώνεται ότι αι δοκιμές πραγματοποιούνται κατά τρόπο που παρέχει τουλάχιστον τον ίδιο βαθμό ασφάλειας και πρόληψης ρύπανσης όπως προβλέπεται από αυτούς του κανονισμούς. Οι δοκιμές αυτές θα πραγματοποιούνται σύμφωνα με οδηγίες που έχουν υιοθετηθεί από τον Οργανισμό.
- 4 Τα στοιχεία τέταων δοκιμών θα αναφέρονται στον Οργανισμό το νωρίτερο πρακτικά δυνατόν, αλλά όχι σε διάστημα λιγότερο από έξι μήνες πριν από την ημερομηνία κατά την οποία οι δοκιμές έχει προγραμματισθεί να αρχίσουν. Ο Οργανισμός θα ανακοινώνει τέτσιου είδους στοιχεία σε όλα τα Μέρη.
- 5 Τα αποτελέσματα δοκιμών που έχουν εξουσιοδοτηθεί σύμφωνα με την παράγραφο 1, και οπαιεσδήποτε συστάσεις που η Αρχή μπορεί να έχει όσον αφορά τα αποτελέσματα αυτά, θα αναφέρονται στον Οργανισμό που θα ανακοινώνει αυτά τα αποτελέσματα και τις συστάσεις σε όλα τα Μέρη.
- 6 Οποιοδήποτε Μέρος έχει οποιεσδήποτε αντιρρήσεις σε συγκεκριμένες δοκιμές που έχουν εξουσιοδοτηθεί σύμφωνα με αυτό τον κανονισμό πρέπει να ανακονώνει την αντίρρηση αυτή στον Οργανισμό το νωρίτερο πρακτικά δυνατόν. Ο Οργανισμός θα κοινοποιεί στοιχεία της αντίρρησης σε όλα τα Μέρη.
- 7 Αρχή που έχει εξουσιοδοτήσει δοκιμή θα σέβεται τις αντιρρήσεις που λαμβάνει από άλλα Μέρη και που έχουν σχέση με τέται α δοκιμή κατευθύνοντας πλοία, που δικαιούνται να φέρουν την σημαία της, να μη συμμετέχουν σε δοκιμές όταν ναυσιπλοούν σε ύδατα παράκτιας χώρας η οποία έχει ανακανώσει τις αντιρρήσεις της στον Οργανισμό.
- 8 Αρχή που συμπεραίνει, με βάση τη δοκιμή όπι ένα συγκεκριμένο σύστημα θα παρέχει τουλάχιστον τον αυτό βαθμό ασφάλειας και πρόληψης ρύπανσης όπως προβλέπεται από αυτούς τους κανονισμούς μπορεί να εξουσιοδοτεί, πλοία που δικαιούνται να φέρουν τη σημαία της, να συνεχίσουν να λειτουργούν με τέταιο σύστημα απεριόριστα, αλλά θα υπόκεινται στις παρακάτω απαιτήσεις:
  - .1 Η Αρχή, αφού τα αποτελέσματα των δοκιμών θα έχουν υποβληθεί σύμφωνα με την παράγραφο 5, θα δίδει σταιχεία οπαιασδήποτε τέταιου είδους εξουσιοδότησης, περιλαμβάνοντας και τα σταιχεία των συγκεκριμένων πλοίων που έχουν εξουσιοδοτηθεί στον Οργανισμό, ο οποίος θα κανοπαιεί αυτές τις πληροφορίες σε όλα τα Μέρη,
  - .2 όπαιες λειτουργίες εξουσιοδοτήθηκαν σύμφωνα με αυτή τη παράγραφο θα πραγματοπαιούνται σύμφωνα με οπαιεσδήποτε οδηγίες αναπτύχθηκαν από τον Οργανισμό, στην ίδια έκταση που τσχύουν κατά την διάρκεια της δοκιμής.
  - .3 τέτοιες λειτουργίες θα σέβονται οποιεσδήποτε αντιρρήσεις λαμβάνονται από άλλα Μέρη σύμφωνα με την παράγραφο 7, στον βαθμό που αυτές οι αντιρρήσεις δεν έχουν αποσυρθεί, και
  - .4 λειτουργία που έχει εξουσιοδοτηθεί σύμφωνα με αυτή την παράγραφο θα επιτρέπεται μόνο εν αναμονή καθορισμού από την Επιτροπή Ναυτικής Ασφαλείας ως προς το κατά πόσον μία τροποποίηση της Σύμβασης θα είναι κατάλληλη, και, εάν ναι, κατά πόσον η λειτουργία θα ανασταλεί ή θα επιτραπεί να συνεχισθεί πριν η τροποποίηση τεθεί σε ισχύ.

9 Με αίτηση οποιουδήποτε Μέρους, η Επιτροπή Ναυτικής Ασφαλείας θα καθορίζει ημερομηνία εξέτασης των αποτελεσμάτων της δοκιμής και την εξαγωγή συμπερασμάτων.

# Κανονισμός Ι/14

Ευθύνες εταιριών

- 1 Κάθε Αρχή σύμφωνα με τις διατάξεις του τμήματος Α-Ι/14 θα θεωρεί τις εταιρείες υπεύθυνες για την ανάθεση εργασίας σε ναυτικούς στα πλοία τους, σύμφωνα με τις διατάξεις της παρούσας Σύμβασης και θα απαιτεί όπως κάθε εταιρία εξασφαλίζει ότι:
  - .1 κάθε ναυτικός που του ανατίθεται εργασία σε οποιοδήποτε πλοίο της διαθέτει κατάλληλο πιστοποιητικό σύμφωνα με τις διατάξεις της Σύμβασης και όπως έχει ορισθεί από την Αρχή,
  - .2 τα πλοία της επανδρώνονται σύμφωνα με τις ισχύουσες απαιτήσεις ασφαλούς επάνδρωσης της Αρχής,

- .3 οι ναυτικοί που τους ανατίθεται εργασία σε οποιοδήποτε πλοίο να έχουν λάβει την κατάλληλη εκπαίδευση ανανέωσης και εκσυγχρονισμού γνώσεων, όπως απαιτείται από την Σύμβαση,
- .4 θα τηρούνται έγγραφα και σταιχεία σχετικά με όλους τους ναυτικούς που απασχολούνται στα πλοία της, θα είναι άμεσα διαθέσιμα και θα περιλαμβάνουν χωρίς να περιορίζονται σε στοιχεία και τεκμηρίωση της εμπειρίας τους, εκπαίδευσης, υγειονομικής καταλληλότητας και ικανότητας στα καθήκοντα που τους έχουν ανατεθεί,
- .5 α ναυτικοί που κατά την ανάληψη εργασίας σε οπαιοδήποτε από τα πλοία της είναι εξαικειωμένα με τα συγκεκριμένα καθήκοντά τους και με όλες τις διατάξεις, εγκαταστάσεις, εξοπλισμό, διαδικασίες και χαρακτηριστικά του πλοίου που είναι σχετικά με τα συνήθη καθήκοντά τους και τα καθήκοντά τους σε κατάσταση ανάγκης,
- .6 το πλήρωμα του πλοίου είναι σε θέση να συντονίσει αποτελεσματικά τις δραστηριότητές του σε κατάσταση ανάγκης και να εκτελέσει καθήκοντα ζωτικής σημασίας για την ασφάλεια και την αποφυγή ή τον περιορισμό της ρύπανσης, και
- .7 όταν τα πλοία ταξιδεύουν πρέπει να υπάρχει σε κάθε περίπτωση επαρκής προφορική επικανωνία σύμφωνα με το κεφάλοιο V, κανονισμό 14, παράγραφοι 3 και 4 της Διεθνούς Σύμβασης για την Ασφάλεια της Ζωής στη Θάλασσα, 1974 (SOLAS), όπως τροποπαήθηκε.

# Κανονισμός 1/15

Μεταβατικές διατάξεις

- 1 Μέχρι την 1<sup>η</sup> Ιανουαρίου 2017, Μέρος μπορεί να συνεχίσει να εκδίδει, αναγνωρίζει και θεωρεί πιστοποιηπικά σύμφωνα με τις διατάξεις της Σύμβασης που ίσχυε αμέσως πριν τη 1<sup>η</sup> Ιανουαρίου 2012, όσον αφορά εκείνους τους ναυτικούς που άρχισαν εγκεκριμένη θαλάσσια υπηρεσία, εγκεκριμένη εκπαίδευση και πρόγραμμα άσκησης ή εγκεκριμένο κύκλο εκπαίδευσης πριν την 1<sup>η</sup> Ιουλίου 2013.
- 2 Μέχρι την  $1^{\eta}$  Ιανουαρίου 2017, Μέρος μπορεί να συνεχίζει να ανανεώνει, επεκτείνει και επανακυρώνει την ισχύ πιστοπαιητικών και θεωρήσεων σύμφωνα με τις διατάξεις της Σύμβασης που ίσχυε αμέσως πριν την  $1^{\eta}$  Ιανουαρίου 2012.

### ΚΕΦΑΛΑΙΟ ΙΙ

# ΠΛΟΙΑΡΧΟΣ ΚΑΙ ΤΜΗΜΑ ΚΑΤΑΣΤΡΩΜΑΤΟΣ

Κανονισμός ΙΙ/1

Υποχρεωπκές ελάχιστες απαιτήσεις για την πιστοποίηση αξιωματικών που εκτελούν φυλακή ναυσιπλοΐας σε πλοία 500 ο.χ. και άνω.

- 1 Κάθε αξιωματικός που είναι υπεύθυνος φυλακής ναυσιπλοΐας και υπηρετεί σε ποντοπόρα πλοία 500 ο.χ. και άνω θα διαθέτει πιστοπαιητικό ικανότητας.
- 2 Κάθε υποψήφιος για πιστοποίηση:
  - .1 δεν θα είναι ηλικίας μικρότερης των 18 ετών,
  - .2 θα διαθέτει εγκεκριμένη θαλάσσια υπηρεσία, όχι λιγότερη από 12 μήνες που θα αποτελεί τμήμα εγκεκριμένου προγράμματος εκπαίδευσης το οποίο περιλαμβάνει εκπαίδευση επί πλοίου η οποία θα πληροί τις απαιτήσεις του τμήματος Α-ΙΙ/1 του Κώδικα STCW και θα είναι καταχωρημένη σε εγκεκριμένο βιβλίο αρχείου εκπαίδευσης, ή διαφορετικά θα έχει εγκεκριμένη θαλάσσια υπηρεσία όχι λιγότερη των 36 μηνών,
  - .3 θα έχει εκτελέσει, κατά την διάρκεια της απαιτουμένης θαλάσσιας υπηρεσίας, καθήκοντα τήρησης φυλακής γέφυρας υπό την επίβλεψη του πλοιάρχου ή προσοντούχου αξιωματικού για χρονική περίοδο όχι μικρότερη των 6 μηνών,
  - .4 θα πληροί στις αντίστα χες ισχύουσες απαιτήσεις των κανονισμών του κεφαλαίου IV, κατά περίπτωση, για την εκτέλεση καθορισμένων καθηκόντων ραδιοεπικανωνιών σύμφωνα με τους Κανονισμούς Ραδιοεπικοινωνιών,
  - .5 θα έχει ολοκληρώσει εγκεκριμένη εκπαίδευση και άσκηση και θα πληροί στο πρότυπο ικανότητας που καθορίζεται στο τμήμα Α-ΙΙ/1 του Κώδικα STCW, και
  - .6 θα πληροί τα πρότυπα ικανότητας που καθορίζονται στο τμήμα Α-VI/1, παράγραφος 2, τμήμα Α-VI/2, παράγραφοι 1 έως 4, τμήμα A-VI/3, παράγραφοι 1 έως 4, και τμήμα A-VI/4, παράγραφοι 1 έως 3 του Κώδικα STCW.

Κανονισμός ΙΙ/2

Υποχρεωτικές ελάχιστες απαιτήσεις για πιστοποίηση πλοιάρχων και υποπλοιάρχων σε πλοία 500 ο.χ. και άνω

# Πλοίαρχος και υποπλοίαρχος σε πλοία 3000 ο.χ. και άνω

- 1 Κάθε πλοίαρχος και υποπλοίαρχος ποντοπόρου πλοίου 3000 ο.χ. και άνω θα είναι κάτοχος πιστοποιητικού εκανότητας.
- 2 Κάθε υποψήφιος για πιστοποίηση θα:
  - .1 πληροί τις απαιτήσεις για πιστοποίηση σαν αξιωματικός τήρησης φυλακής ναυσιπλοΐας σε πλοία 500 ο.Χ. και άνω και θα διαθέτει εγκεκριμένη θαλάσσια υπηρεσία με αυτή την ειδικότητα:
    - .1.1 για πιστοποίηση ως υποπλοίαρχος, όχι λιγότερη από 12 μήνες, και
    - .1.2 για πιστοποίηση ως πλοίαρχος, όχι λιγότερη από 36 μήνες, όμως η περίοδος αυτή μπορεί να μειωθεί σε όχι λιγότερη από 24 μήνες, αν τουλάχιστον 12 μήνες αυτής της θαλάσσιας υπηρεσίας έχει πραγματοποιηθεί σε θέση υποπλοιάρχου, και
  - .2 θα έχει ολοκληρώσει εγκεκριμένη εκπαίδευση και άσκηση και πληροί τα πρότυπα ικανότητας που καθορίζονται στο τμήμα Α-ΙΙ/2 του Κώδικα STCW για πλαάρχους και υποπλαάρχους πλοίων 3000 ο.χ. και άνω.

Πλοίαρχος και υποπλοίαρχος πλοίων μεταξύ 500 και 3000 ο.χ.

- 3 Κάθε πλοίαρχος και υποπλοίαρχος ποντοπόρου πλοίου μεταξύ 500 και 3000 ο.χ. θα διαθέτει πιστοπαιητικό ικανότητας..
- 4 Κάθε υποψήφιος για πιστοποίηση θα:
  - .1 για πιστοποίηση ως υποπλοίαρχος, θα πληροί τις απαιτήσεις αξιωματικού τήρησης φυλακής ναυσιπλοΐας σε πλοία 500 ο.χ. και άνω,
  - .2 για πιστοποίηση ως πλοίαρχος θα ανταποκρίνεται στις απαιτήσεις αξιωματικού τήρησης φυλακής ναυσιπλοΐας σε πλοία 500 ο.χ. και άνω και θα διαθέτει εγκεκριμένη θαλάσσια υπηρεσία όχι λιγότερη των 36 μηνών με αυτή την ειδικότητα. Όμως η περίοδος αυτή μπορεί να μειωθεί σε όχι λιγότερη από 24 μήνες αν τουλάχιστον 12 μήνες αυτής της θαλάσσιας υπηρεσίας έχουν πραγματοποιηθεί με την ι-διότητα του υποπλαιάρχου, και
  - .3 θα έχει ολοκληρώσει εγκεκριμένη εκπαίδευση και θα πληροί τα πρότυπα ικανότητας που καθορίζονται στο τμήμα Α-ΙΙ/2 του Κώδικα STCW για πλαιάρχους και υποπλαιάρχους πλοίων μεταξύ 500 και 3000 ο.χ..

# Κανονισμός ΙΙ/3

Υποχρεωτικές ελάχιστες απαιτήσεις πιστοποίησης αξιωματικών που είναι υπεύθυνοι τήρησης φυλακής ναυσιπλοΐας και πλοιάρχων πλοίων κάτω των 500 ο.χ..

# Πλοία που δεν εκτελούν παράκτιους πλόες

- 1 Κάθε αξωματικός υπεύθυνος τήρησης φυλακής ναυσιπλοΐας που υπηρετεί σε ποντοπόρο πλοίο κάτω των 500 ο.χ. που δεν εκτελεί παράκπους πλόες, θα διαθέτει πιστοποιητικό κανότητας για πλοία 500 ο.χ. και άνω.
- 2 Κάθε πλοίαρχος που υπηρετεί σε ποντοπόρο πλοίο μικρότερο των 500 ο.χ. που δεν εκτελεί παράκπους πλόες θα διαθέτει πιστοποιητικότκανότητας για υπηρεσία ως πλοίαρχος σε πλοία μεταξύ 500 και 3000 ο.χ..

# Πλοία που εκτελούν παράκτιους πλόες

Αξιωματικός υπεύθυνος τήρησης φυλακής ναυσιπλοΐας

- 3 Κάθε αξιωματικός υπεύθυνος τήρησης φυλακής ναυσιπλοΐας ποντοπόρου πλοίου μικρότερου των 500 ο.χ.. που εκτελεί παράκτιους πλόες θα διαθέτει πιστοποιητικό ικανότητας.
- 4 κάθε υποψήφιος για πιστοποίηση ως αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας σε ποντοπόρο πλοίο μικρότερο των 500 ο.χ. που εκτελεί παράκτιους πλόες:
  - .1 δεν θα είναι ηλικίας μικρότερης των 18 ετών.
  - .2 θα έχει ολοκληρώσει...
    - .2.1 ειδική εκπαίδευση, που θα περιλαμβάνει επαρκή χρονική περίοδο κατάλληλης θαλάσσιας υπηρεσίας όπως απαιτείται από την Αρχή, ή
    - .2.2 εγκεκριμένη θαλάσσια υπηρεσία στο τμήμα καταστρώματος όχι μικρότερη των 36 μηνών,
  - .3 θα πληροί τις αντίστοιχες ισχύουσες απαιτήσεις των κανονισμών του κεφαλαίου IV, για την εκτέλεση καθορισμένων καθηκόντων ραδιοεπικοινωνιών σύμφωνα με τους Κανονισμούς Ραδιοεπικοινωνιών,
  - .4 θα έχει ολοκληρώσει εγκεκριμένη εκπαίδευση και άσκηση και θα πληροί το πρότυπο ικανότητας που καθορίζεται στο τμήμα Α-ΙΙ/3 του Κώδικα STCW για αξιωματικούς που είναι υπεύθυναι τήρησης φυλακής ναυσιπλοΐας σε πλοία μικρότερα των 500 κ.ο.χ που εκτελούν παράκτιους πλόες, και
  - .5 θα πληροί τα πρότυπα ικανότητας που καθορίζονται στο τμήμα Α-VI/1, παράγραφος 2, τμήμα Α-VI/2, παράγραφοι 1 έως 4, τμήμα Α-VI/3, παράγραφοι 1 έως 4 και τμήμα Α-VI/4, παράγραφοι 1 έως 3 του Κώδικα STCW.

### Πλοίαρχος

5 Κάθε πλοίαρχος που υπηρετεί σε ποντοπόρο πλοίο μικρότερο των 500 ο.χ. που εκτελεί παράκπους πλόες πρέπει να είναι κάτοχος πιστοποιητικού ικανότητας.

6 κάθε υποψήφιος για πιστοποίηση ως πλοίαρχος ποντοπόρου πλοίου μικρότερου των 500 ο.χ. που εκτελεί παράκπους πλόες:

- .1 δεν θα είναι ηλικίας μικρότερης των 20 ετών,
- .2 θα έχει εγκεκριμένη θαλάσσια υπηρεσία όχι λιγότερη των 12 μηνών ως αξιωματικός τήρησης φυλακής ναυσιπλοΐας,
- .3 θα έχει ολοκληρώσει εγκεκριμένη εκπαίδευση και άσκηση και θα πληροί τα πρότυπα ικανότητας που καθορίζοντα στο τμήμα Α-ΙΙ/3 του Κώδικα STCW για πλοιάρχους πλοίων μικρότερων των 500 ο.χ. που εκτελούν παράκπους πλόες, και
- .4 θα πληροί τα πρότυπα ικανότητας που καθορίζονται στο τμήμα Α-VI/1, παράγραφος 2, τμήμα Α-VI/2, παράγραφα 1 έως 4, τμήμα Α-VÍ/3, παράγραφα 1 έως 4, και τμήμα Α-VI/4, παράγραφα 1έως 3 του Κώδικα STCW.

# Εξαιρέσεις

7 Η Αρχή, εάν θεωρεί ότι το μέγεθος του πλοίου και οι συνθήκες του πλου του είναι τέτοιες που καθιστούν την εφαρμογή του συνόλου των απαιτήσεων του κανονισμού αυτού και του τμήματος Α-ΙΙ/3 του Κώδικα STCW μή λογική ή πρακτικά αδύνατη, μπορεί σε αυτόν τον βαθμό να εξαιρέσει τον πλοίαρχο και τον υπεύθυνο της φυλακής ναυσιπλοΐας σε τέταιο πλοίο ή κατηγορία πλοίων από κάπαες απατήσεις, λαμβάνοντας υπ' όψη την ασφάλεια όλων των πλοίων που κινούνται στην ίδια θαλάσσια περιοχή.

Υποχρεωτικές ελάχιστες απαιτήσεις πιστοποίησης για μέλη πληρώματος που αποτελούν τμήμα φυλακής ναυσιπλοΐας\*

- 1 Κάθε μέλος πληρώματος που αποτελεί μέλος φυλακής ναυσιπλοΐας σε ποντοπόρο πλοίο 500 ο.χ. και άνω, εκτός εκείνων που είναι υπό εκπαίδευση και μέλη πληρώματος τα κάθήκοντα των οποίων ενώ εκτελούν φυλακή είναι ανειδικεύτου χαρακτήρα, θα διαθέτουν τα κατάλληλα πιστοποιητικά για να εκτελούν τέτοια καθήκοντα.
- 2 Κάθε υποψήφιος για πιστοποίήση:
  - .1 δεν θα είναι μικρότερος των 16 ετών,
  - .2 θα έχει ολοκληρώσει:
    - .2.1 εγκεκριμένη θαλάσσια υπηρεσία που θα περιλαμβάνει όχι λιγότερη από έξι μήνες εκπαίδευση και εμπειρία, ή
    - .2.2 θα έχει υποστεί ειδική εκπαίδευση, είτε πριν από την ναυτολόγηση είτε στο πλοίο, περιλαμβανομένης και αναγνωρισμένης θαλάσσιας υπηρεσίας διάρκειας όχι λιγότερης των δύο μηνών, ΚĊI
  - .3 θα πληροί το πρότυπο ικανότητας που καθορίζεται στο τμήμα Α-ΙΙ/4 του Κώδικα STCW.
- 3 Η θαλάσσια υπηρεσία, εκπαίδευση και εμπειρία που απαιτείται από τις υποπαραγράφους 2.2.1. και 2.2.2. θα είναι σχετικές με λειτουργίες τήρησης φυλακής ναυσιπλοΐας και θα περιέχουν την εκτέλεση καθηκόντων που εκτελούνται υπό την άμεση επίβλεψη του πλαιάρχου, του αξιωματικού υπευθύνου φυλακής ναυσιπλοΐας ή προσοντούχου μέλους του πληρώματος.

Κανονισμός ΙΙ/5

Υποχρεωτικές ελάχιστες απαιτήσεις πιστοποίησης για ειδικευμένο ναυτικό καταστρώματος

Οι αναφερόμενες απαιτήσεις δεν είναι αυτές για την πιστοποίηση του ειακευμένου ναυτικού, όπως περιλαμβάνονται στην κατά ILO Σύμβαση πιστοποίησης του ειδικευμένου ναυτικού, 1946, ή οπαιαδήποτε άλλη σύμβαση.

- 1 Κάθε ειδικευμένος ναυτικός καταστρώματος που υπηρετεί σε ποντοπόρο πλοίο 500 ο.χ. και άνω θα είναι κατάλληλα πιστοπαιημένος.
- 2 Κάθε υποψήφιος για πιστοποίηση:
  - .1 δεν θα είναι ηλικίας μικρότερης των 18 ετών,
  - .2 θα πληροί τις απαιτήσεις πιστοποίησης για μέλος πληρώματος που αποτελεί τμήμα φυλακής ναυσιπλοΐας,
  - .3 για να έχει τα προσόντα να υπηρετεί ως μέλος πληρώματος που αποτελεί τμήμα φυλακής ναυσιπλοΐας θα πρέπει να έχει εγκεκριμένη θαλάσσια υπηρεσία σε τιμήμα καταστρώματος:
    - .3.1 όχι λιγότερη των 18 μηνών, ή
    - .3.2 όχι λιγότερη των 12 μηνών και να έχει ολοκληρωμένη αναγνωρισμένη εκπαίδευση, και
  - .4 να πληροί το πρότυπο ικανότητας που καθορίζεται στο τμήμα Α-ΙΙ/5 του Κώδικα STCW.
- 3 Κάθε Μέρος θα συγκρίνει τα πρότυπα ικανότητας που απαιτούνται από τους Ειδικευμένους Ναυτικούς (Able Seamen) για πιστοπαιτικά που εκδόθηκαν πριν την 1η Ιανουάριου 2012, με τα πρότυπα που καθορίζονται για το αντίστοιχο πιστοπαιτικό στο τμήμα Α-ΙΙ/5 του Κώδικα STCW, και θα αποφασίζει αν υπάρχει ανάγκη, το προσωπικό να αναβαθμίσει τα προσόντα του.
- 4 Μέχρι την 1<sup>η</sup> Ιανουαρίου 2012, ένα Μέρος που είναι επίσης Μέρος της International Labour Organization Certification of Able Seamen Convention,1946 (No 74), μπορεί να συνεχίζει να εκδίδει, να αναγνωρίζει και να θεώρει πιστοπαιητικά σύμφωνα με τις διατάξεις της εν λόγω Σύμβασης.
- 5 Μέχρι την 1<sup>η</sup> Ιανουαρίου 2017, ένα Μέρος που είναι επίσης Μέρος της International Labour Organization Certification of Able Seamen Convention,1946 (No 74) μπορεί να συνεχίζει να ανανεώνει και να επαναεπικυρώνει πιστοποιητικά και θεωρήσεις σύμφωνα με τις διατάξεις της εν λόγω Σύμβασης.
- 6 Οι ναυτικοί μπορεί να θεωρηθούν από το Μέρος ότι πληρούν τις απαιτήσεις αυτού του κανονισμού αν έχουν υπηρετήσει σε αντίστοιχη θέση στο τμήμα καταστρώματος για χρονική περίοδο τουλάχιστον 12 μηνών εντός των αμέσως προηγουμένων 60 μηνών πριν από την θέση σε ισχύ της Σύμβασης από αυτό το Μέρος.

### ΚΕΦΑΛΑΙΟ III

# ΤΜΗΜΑ ΜΗΧΑΝΟΣΤΑΣΙΟΥ

Υποχρεωτικές ελάχιστες απαιτήσεις για την πιστοποίηση αξιωματικών υπεύθυνων φυλακής μηχανοστασίου, σε επανδρωμένο μηχανοστάσιο ή οριζόμενων αξιωματικών υπηρεσίας μηχανοστασίου σε περιοδικά μη επανδρωμένο μηχανοστάσιο.

- 1 Κάθε αξιωματικός υπεύθυνος φυλακής μηχανοστασίου σε επανδρωμένο μηχανοστάσιο ή οριζόμενος αξιωματικός υπηρεσίας μηχανοστασίου σε περιοδικά μη επανδρωμένο μηχανοστάσιο, σε ποντοπόρο πλοίο που διαθέτει κύριες μηχανές πρόωσης ισχύος 750 KW και άνω θα διαθέτει πιστοποιητικό ικανότητας.
- 2 Κάθε υποψήφιος για πιστοποίηση:
  - .1 δεν θα είναι ηλικίας μικρότερης των 18 ετών,
  - .2 θα έχει ολοκληρώσει εκπαίδευση εργαστηριακών δεξιοτήτων και εγκεκριμένη θαλάσσια υπηρεσία όχι λιγότερη των 12 μήνων που θα αποτελεί τμήμα εγκεκριμένου προγράμματος εκπαίδευσης το οποίο περιλαμβάνα εκπαίδευση επί πλοίου η οποία θα πληροί τις απαιτήσεις του τμήματος Α-ΙΙΙ/1 του Κώδικα STCW και θα είναι καταχωρημένη σε εγκεκριμένο βιβλίο αρχείου εκπαίδευσης, ή διαφορετικά θα έχει ολοκληρώσει εκπαίδευση εργαστηριακών δεξιοτήτων και θα έχει εγκεκριμένη θαλάσσια υπηρεσία όχι λιγότερη των 36 μηνών, από την οποία τουλάχιστον 30 μήνες θα είναι θαλάσσια υπηρεσία στο τμήμα μηχανοστασίου,
  - .3 θα έχει εκτελέσει, κατά την διάρκεια της απαιτουμένης θαλάσσιας υπηρεσίας, καθήκοντα τήρησης φυλακής μηχανοστασίου υπό την επίβλεψη του πρώτου μηχανικού ή προσοντούχου αξιωματικού μηχανής για χρονική περίοδο όχι μικρότερη των έξι μηνών,
  - .4 θα έχει ολοκληρώσει εγκεκριμένη εκπαίδευση και άσκηση και θα πληροί το πρότυπο ικανότητας που καθορίζεται στο τμήμα A-III/1 του Κώδικα STCW, και
  - .5 θα πληροί τα πρότυπα ικανότητας που καθορίζονται στο τμήμα Α-VI/1, παράγραφος 2, τμήμα Α-VI/2, παράγραφα 1 έως 4, τμήμα Α-VI/3, παράγραφα 1 έως 4 και τμήμα Α-VI/4, παράγραφα 1 έως 3 του Κώδικα STCW.

Κανονισμός ΙΙΙ/2

Υποχρεωπκές ελάχιστες απαιτήσεις για την πιστοποίηση του πρώτου και δεύτερου μηχανικού πλοίων των οποίων η κύρια μηχανή πρόωσης ειναι 3000 ΚW και άνω

- 1 Κάθε πρώτος και δεύτερος μηχανικός ποντοπόρου πλοίου του οποίου η ισχύς της κύριας μηχανής πρόωσης είναι 3000 ΚW και άνω θα διαθέτει πιστοπαιητικό ικανότητας.
- 2 Κάθε υποψήφιος για πιστοποίηση:
  - .1 θα πληροί τις απαιτήσεις πιστοποίησης αξιωματικού υπεύθυνου φυλακής μηχανής σε ποντοπόρα πλοία των οποίων η κύρια μηχανή πρόωσης είναι 750 kW και άνω και θα έχει εγκεκριμένη θαλάσσια υπηρεσία με αυτήν την ειδικότητα:
    - .1.1 για πιστοποίηση ως δεύτερος μηχανικός, δε θα έχει λιγότερη από 12 μήνες ως προσοντούχος αξιωματικός μηχανής, και
    - .1.2 για πιστοποίηση ως πρώτος μηχανικός, δε θα έχει λιγότερη από 36 μήνες: ωστόσο αυτή η περίοδος μπορεί να μειωθεί σε όχι λιγότερο από 24 μήνες αν τουλάχιστον 12 μήνες αυτής της θαλάσσιας υπηρεσίας έχει πραγματοποιήθεί ως δεύτερος μηχανικός, και
  - .2 θα έχει ολοκληρώσει εγκεκριμένη εκπαίδευση και άσκηση και θα ανταποκρίνεται στα πρότυπα ικανότητας που καθορίζονται στο τμήμα Α-ΙΙΙ/2 του Κώδικα STCW.

Κανονισμός ΙΙΙ/3

Υποχρεωτικές ελάχιστες απαιτήσεις για τη πιστοποίηση πρώτων και δεύτερων μηχανικών σε πλοία των οποίων η ισχύς της κύριας μηχανής πρόωσης είναι μεταξύ 750 KW και 3000 KW

- 1 Κάθε πρώτος και δεύτερος μηχανικός ποντοπόρου πλοίου του οποίου η ισχύς της κύριας μηχανής πρόωσης είναι μεταξύ 750 KW και 3000 KW θα διαθέτει πιστοπισητικό ικανότητας.
- 2 Κάθε υποψήφιος για πιστοποίηση:
  - .1 θα εκανοπαιεί τις απαιτήσεις πιστοποίησης ως αξιωματικός υπεύθυνος φυλακής μηχανοστασίου και:
    - .1.1. για πιστοποίηση ως δεύτερος μηχανικός θα διαθέτει εγκεκριμένη θαλάσσια υπηρεσία όχι μεκρότερη των 12 μηνών ως βοηθός αξιωματικός μηχανής ή ως αξιωματικός μηχανής και
    - .1.2. για πιστοποίηση ως πρώτος μηχανικός, θα διαθέτει εγκεκριμένη θαλάσσια υπηρεσία όχι μικρότερη των 24 μηνών εκ των οποίων τουλάχιστον 12 μήνες θα έχουν πραγματοποιηθεί ενώ είναι πιστοποιημένος να υπηρετεί ως δεύτερος μηχανικός, και
  - .2 Έχει ολοκληρώσει εγκεκριμένη εκπαίδευση και άσκηση και πληροί τα πρότυπα ικανότητας που καθορίζονται στο τμήμα Α-ΙΙΙ/3 του Κώδικα STCW.
- 3 Κάθε αξιωματικός μηχανής που διαθέτει τα προσόντα για να υπηρετήσει ως δεύτερος μηχανικός σε πλοία των οποίων η ισχύς της κύριας μηχανής πρόωσης είναι 3000 KW και άνω, μπορεί να υπηρετήσει ως πρώτος μηχανικός σε πλοία των οποίων η ισχύς της κύριας μηχανής είναι μικρότερη των 3000 KW υπό την προϋπόθεση ότι το πιστοποιητικό έχει θεωρηθεί γι΄ αυτό.

## Κανονισμός ΙΙΙ/4

Ελάχιστες υποχρεωτικές απαιτήσεις για πιστοποίηση μελών πληρώματος που αποτελούν τμήμα φυλακής σε επανδρωμένο μηχανοστάσιο ή έχουν ορισθεί να εκτελούν καθήκοντα σε περιοδικά μη επανδρωμένο μηχανοστάσιο.

- 1 Κάθε μέλος πληρώματος που αποτελεί τμήμα φυλακής μηχανοστασίου ή έχει ορισθεί να εκτελεί καθήκοντα σε περιοδικά μη επανδρωμένο μηχανοστάσιο σε ποντοπόρο πλοίο που η κύρια μηχανή πρόωσης είναι ισχύος 750 KW και άνω, εκτός εκείνων που τελούν υπό εκπαίδευση και των μελών πληρώματος των οποίων τα καθήκοντα είναι ανειδικεύτου χαρακτήρα, θα διαθέτουν κατάλληλο πιστοπισητικό για να εκτελούν τέταια καθήκοντα.
- 2 Κάθε υποψήφιος για πιστοποίηση:
  - .1 δεν θα είναι ηλικίας μικρότερης των 16 ετών
  - .2 θα έχει ολοκληρώσει:
    - .2.1 εγκεκριμένη θαλάσσια υπηρεσία περιλαμβανομένης εκπαίδευσης και εμπαιρίας τουλάχιστον έξι μηνών, ή
    - .2.2 ειδική εκπαίδευση, είτε πριν από τη ναυτολόγηση ή σε πλοίο, στην οποία θα περιλαμβάνεται αναγνωρισμένη υπηρεσία όχι μικρότερη των δύο μηνών, και
  - .3 θα ανταποκρίνεται στα πρότυπα ικανότητας που καθορίζονται στο τμήμα A-III/4 του Κώδικα STCW.
- 3. Η θαλάσσια υπηρεσία, εκπαίδευση και εμπειρία που απαιτούνται από τις υποπαραγράφους 2.2.1 και 2.2.2 θα σχετίζονται με τις δραστηριότητες τήρησης φυλακής μηχανοστασίου και θα περιλαμβάνουν την εκτέλεση καθηκόντων που πραγματοπαιούνται υπό την άμεση επίβλεψη προσοντούχου μηχανικού ή προσοντούχου μέλους πληρώματος.

### Κανονισμός ΙΙΙ/5

Ελάχιστες υποχρεωτικές απαιτήσεις για πιστοποίηση μελών πληρώματος ως ειδικευμένων ναυτικών μηχανής σε επανδρωμένο μηχανοστάσιο ή μελών πληρώματος που έχουν ορισθεί να εκτελούν καθήκοντα σε περιοδικά μη επανδρωμένο μηχανοστάσιο.

- 1 Κάθε ειδικευμένος ναυτικός μηχανής που υπηρετεί σε ποντοπόρο πλοίο που η κύρια μηχανή πρόωσης είναι ισχύος 750 ΚW και άνω, θα είναι κατάλληλα πιστοπαιημένος.
- Κάθε υποψήφιος για πιστοποίηση:

- .1 δεν θα είναι ηλικίας μικρότερης των 18 ετών,
- .2 θα πληροί τις απατήσεις πιστοποίησης για μέλος πληρώματος που αποτελεί τμήμα φυλακής σε επανδρωμένο μηχανοστάσιο ή έχει ορισθεί να εκτελεί καθήκοντα σε περιοδικά μη επανδρωμένο μηχανοστάσιο,
- .3 για να έχει τα προσόντα να υπηρετεί ως μέλος πληρώματος που αποτελεί τμήμα φυλακής μηχανοστασίου θα πρέπει να έχει εγκεκριμένη θαλάσσια υπηρεσία σε μηχανοστάσιο:
  - .3.1 όχι λιγότερη των 12 μηνών, ή
  - .3.2. όχι λιγότερη των 6 μηνών και να έχει ολοκληρωμένη αναγνωρισμένη εκπαίδευση, και
- .4 να πληροί το πρότυπο ικανότητας που καθορίζεται στο τμήμα Α-ΙΙΙ/5 του Κώδικα STCW.
- 3 Κάθε Μέρος θα συγκρίνει τα πρότυπα ικανότητας που αυτό απαίτησε από μέλη πληρώματος μηχανοστασίου για πιστοποιητικά που εκδόθηκαν πριν την 1η Ιανουαρίου 2012 με τα πρότυπα που καθορίζονται για το αντίσταχο πιστοπαιητικό στο τμήμα Α-ΙΙΙ/5 του Κώδικα STCW, και θα αποφασίζει αν υπάρχει ανάγκη, το προσωπικό να αναβαθμίσει τα προσόντα του.
- 4 Οι ναυτικοί μπορεί να θεωρηθούν από το Μέρος ότι πληρούν τις απαιτήσεις αυτού του κανονισμού αν έχουν υπηρετήσει σε αντίστοιχη ειδικότητα σε τμήμα μηχανοστασίου για χρονική περίοδο τουλάχιστον 12 μηνών εντός των αμέσως προηγούμενων 60 μηνών πριν από τη θέση σε ισχύ της Σύμβασης από αυτό το Μέρος.

Κανονισμός ΙΙΙ/6

Ελάχιστες υποχρεωτικές απαιτήσεις για πιστοποίηση των ηλεκτροτεχνιτών αξιωματικών

- 1 Κάθε ηλεκτροτεχνίτης αξιωματικός που υπηρετεί σε ποντοπόρο πλοίο που η κύρια μηχανή πρόωσης είναι ισχύος 750 ΚW και άνω, θα είναι κάτοχος πιστοποιητικού ικανότητας.
- 2 Κάθε υποψήφιος για πιστοποίηση:
  - .1 δεν θα είναι ηλικίας μικρότερης των 18 ετών,
  - .2 θα έχει ολοκληρώσει εκπαίδευση εργαστηριακών δεξιοτήτων και εγκεκριμένη θαλάσσια υπηρεσία όχι λιγότερη των 12 μηνών από την οποία τουλάχιστον οι 6 μήνες θα αποτελούν τμήμα εγκεκριμένου προγράμματος εκπαίδευσης, η οποία θα πληροί τις απατήσεις του τμήματος Α-ΙΙΙ/6 του Κώδικα STCW και θα είναι καταχωρημένη σε εγκεκριμένο βιβλίο αρχείου εκπαίδευσης, ή διαφορετικά θα έχει ολοκληρώσει εκπαίδευση εργαστηριακών δεξιοτήτων και θα έχει εγκεκριμένη θαλάσσια υπηρεσία όχι λιγότερη των 36 μηνών, από την όποια τουλάχιστον 30 μήνες θα είναι θαλάσσια υπηρεσία στο τμήμα μηχανοστασίου,
  - .3 θα έχει ολοκληρώσει εγκεκριμένη εκπαίδευση και άσκηση και θα πληροί το πρότυπο ικανότητας που καθορίζεται στο τμήμα Α-ΙΙΙ/6 του Κώδικα STCW, και
  - .4 θα πληροί τα πρότυπα ικανότητας που καθορίζονται στο τμήμα Α-VI/1, παράγραφος 2, τμήμα Α-VI/2, παράγραφοι 1 έως 4, τμήμα Α-VI/3, παράγραφοι 1 έως 4 και τμήμα Α-VI/4, παράγραφοι 1 έως 3 του Κώδικα STCW.
- 3 Κάθε Μέρος θα συγκρίνει τα πρότυπα ικανότητας που αυτό απαίτησε από ηλεκτροτεχνικούς αξιωματικούς για πιστοποιητικά που εκδόθηκαν πριν την 1η Ιανουαρίου 2012 με τα πρότυπα που καθορίζονται για το αντίσταχο πιστοποιητικό στο τμήμα Α-ΙΙΙ/6 του Κώδικα STCW και θα αποφασίζει αν υπάρχει ανάγκη, το προσωπικό να αναβαθμίσει τα προσόντα του.
- 4 Οι ναυτικοί μπορεί να θεωρηθούν από το Μέρος ότι πληρούν τις απαιτήσεις αυτού του κανονισμού αν έχουν υπηρετήσει σε αντίσταχη ειδικότητα στο πλοίο για χρονική περίοδο όχι μικρότερη των 12 μηνών εντός των αμέσως προηγούμενων 60 μηνών πριν από τη θέση σε ισχύ της Σύμβασης από αυτό το Μέρος, και όπ πληρούν το πρότυπο ικανότητας που καθορίζεται στο τμήμα Α-ÎÎÎ/6 του Κώδικα STCW.
- 5 Παρά τις παραπάνω απαιτήσεις της παραγράφου 1 έως 4, ένα άτομο με τα κατάλληλα προσόντα μπορεί να θεωρηθεί από το Μέρος ότι είναι ικανό να εκτελεί ορισμένα καθήκοντα του τμήματος Α-ΙΙΙ/6.

### Κανονισμός ΙΙΙ/7

Ελάχιστες υποχρεωτικές απαιτήσεις για πιστοποίηση των ηλεκτροτεχνιτών μελών πληρώματος

- 1 Κάθε ηλεκτροτεχνίτης μέλος πληρώματος που υπηρετεί σε ποντοπόρο πλοίο, που η κύρια μηχανή πρόωσης είναι ισχύος 750 KW και άνω, θα είναι δεόντως πιστοποιημένος.
- 2 Κάθε υποψήφιος για πιστοποίηση:
  - .1 δεν θα είναι ηλικίας μικρότερης των 18 ετών,
  - .2 θα έχει:
    - .2.1 ολοκληρώσει εγκεκριμένη θαλάσσια υπηρεσία περιλαμβανομένης εκπαίδευσης και εμπειρίας τουλάχιστον 12 μηνών, ή
    - .2.2 ολοκληρώσει αναγνωρισμένη εκπαίδευση περιλαμβανομένης θαλάσσιας υπηρεσίας που δεν θα είναι λιγότερη των 6 μηνών, ή
    - .2.3 προσόντα που ανταποκρίνονται στην τεχνική καταλληλότητα του πίνακα Α-ΙΙΙ/7 και αναγνωρισμένη περίοδο θαλάσσιας υπηρεσίας τουλάχιστον 3 μηνών, και
  - .3 θα πληροί το πρότυπο ικανότητας που καθορίζεται στο τμήμα ΑΙΙΙ/7 του Κώδικα STCW.
- 3 Κάθε Μέρος θα συγκρίνει τα πρότυπα ικανότητας που αυτό απαίτησε από ηλεκτροτεχνικούς μέλη πληρώματος για πιστοπαιητικά που εκδόθηκαν πριν την 1η Ιανουαρίου 2012 με τα πρότυπα που καθορίζονται για το αντίστοιχο πιστοπαιητικό στο τμήμα Α-ΙΙΙ/7 του Κώδικα STCW και θα αποφασίζει αν υπάρχει ανάγκη, το προσωπικό να αναβαθμίσει τα προσόντα του.
- 4 Οι ναυτικοί μπορεί να θεωρηθούν από το Μέρος ότι πληρούν τις απαιτήσεις αυτού του κανονισμού αν έχουν υπηρετήσει σε αντίστοιχη ειδικότητα στο πλοίο για χρονική περίοδο όχι μικρότερη των 12 μηνών εντός των αμέσως προηγούμενων 60 μηνών πριν από τη θέση σε ισχύ της Σύμβασης από αυτό το Μέρος, και ότι πληρούν το πρότυπο ικανότητας που καθορίζεται στο τμήμα Α-ΙΙΙ/7 του Κώδικα STCW.
- 5 Παρά τις παραττάνω απαιτήσεις των παραγράφων 1 έως 4, ένα άτομο με τα κατάλληλα προσόντα μπορεί να θεωρηθεί από το Μέρος ότι είναι ικανό να εκτελεί ορισμένα καθήκοντα του τμήματος Α-ΙΙΙ/7.

#### ΚΕΦΑΛΑΙΟ ΙΥ

# ΡΑΔΙΟΕΠΙΚΟΙΝΩΝΙΕΣ ΚΑΙ ΧΕΙΡΙΣΤΕΣ ΡΑΔΙΟΕΠΙΚΟΙΝΩΝΙΩΝ

# Επεξηγηματική σημείωση:

Οι υποχρεωτικές διατάξεις που είναι σχετικές με την τήρηση φυλακής ραδιοεπικανωνιών καθορίζονται στους Κανονισμούς Ραδιοεπικανωνιών και στην Διεθνή Σύμβαση περί Ασφαλείας της Ανθρώπινης Ζωής στην θάλασσα, 1974, όπως τροποπαήθηκε. Διατάξεις συντήρησης των συσκευών ραδιοεπικοινωνιών καθορίζονται στην Διεθνή Σύμβαση περί Ασφαλείας της Ανθρώπινης Ζωής στην θάλασσα, 1974, (SOLAS), όπως τροποπαιήθηκε, και στις οδηγίες που υιοθέτησε ο Οργανισμός.

# Κανονισμός ΙV/1

Εφαρμογή

- 1 Με εξαίρεση των προβλεπομένων της παραγράφου 2, α διατάξεις αυτού του κεφαλαίου ισχύουν για χειριστές ραδιοετικονωνιών σε πλοίο που έχουν ενταχθεί στο Παγκόσμιο Ναυτιλιακό Σύστημα Κίνδύνου και Ασφάλειας (GMDSS) όπως ορίζεται από την Διεθνή Σύμβαση περί Ασφαλείας της Ανθρώπινης Ζωής στην θάλασσα, 1974, όπως τροποποιήθηκε.
- 2 Χειριστές ραδιοεπικανωνιών σε πλοία που δεν υποχρεούνται να συμμορφωθούν με τις διατάξεις του Παγκοσμίου Ναυτιλιακού Συστήματος Κινδύνου και Ασφάλειας (GMDSS) του κεφαλαίου IV της SOLAS δεν απαιτείται να συμμορφώνονται με τις διατάξεις αυτού του κεφαλαίου. Οι χειριστές ραδιοεπικανωνιών αυτών των πλοίων, απαιτείτα να συμμορφώνοντα με τους Κανονισμούς Ραδιοεπικανωνιών. Η Αρχή θα εξασφαλίζει ότι κατάλληλα πιστοποιητικά όπως ορίζονται στους Κανονισμούς Ραδιοεπικανωνιών εκδίδονται ή αναγνωρίζονται για αυτή την κατηγορία χειριστών ραδιοεπικοινωνών.

Κανονισμός ΙV/2

Υποχρεωτικές ελάχιστες απαιτήσεις για την πιστοποίηση χειριστών ραδιοεπικοινωνιών GMDSS

- 1. Κάθε άτομο που προϊσταται ή εκτελεί καθήκοντα ραδιοεπικοινωνιών σε πλοίο που απαιτείται να συμμετέχει στο GMDSS θα διαθέτει κατάλληλο πιστοποιητικό που είναι σχετικό με το GMDSS, που εκδόθηκε ή αναγνώρίστηκε από την Αρχή σύμφωνα με τις διατάξεις των Κανονισμών Ραδιοεπικοινωνιών.
- 2 Επιπρόσθετα, κάθε υποψήφιος για πιστοποίηση σύμφωνα με αυτό τον κανονισμό για υπηρεσία σε πλοίο που υποχρεούται να διαθέτει τηλεπικανωνιακή εγκατάσταση από την Διεθνή Σύμβαση για την Ασφάλεια της Ζωής στην Θάλασσα, 1974, όπως τροποποιήθηκε:
  - .1 δεν θα είναι ηλικίας μικρότερης των 18 ετών, και
  - .2 θα έχει ολοκληρώσει εγκεκριμένη εκπαίδευση και άσκηση και θα πληροί το πρότυπο ικανότητας που καθορίζεται στο τμήμα Α-IV/2 του Κώδικα STCW.

Αναφέρεται στις Οδηγίες συντήρησης ροδιοεπικανωνιών για το Παγκόσμιο Ναυτιλιακό Σύστημα Κίνδύνου και Ασφάλειας (GMDSS) αναφορικά με τις θαλάσσιες περιοχές Α3 και Α4, που υιοθετήθηκαν από τον Οργανισμό με την απόφαση Α.702(17), όπως τροπα ήθηκε.

### ΚΕΦΑΛΑΙΟ V

### Ειδικές απαιτήσεις εκπαίδευσης για προσωπικό συγκεκριμένων τύπων πλοίων

### Κανονισμός V/1-1

Υποχρεωπκές ελάχιστες απαιτήσεις εκπαίδευσης και προσόντων πλοιάρχων, αξιωματικών και μελών πληρώματος σε πετρελαιοφόρα και χημικά δεξαμενόπλοια.

- 1 Αξιωματικοί και μέλη πληρώματος που τους ανατίθενται συγκεκριμένα καθήκοντα και ευθύνες που σχετίζονται με το φορτίο ή με τα μέσα φορτοεκφόρτωσης σε πετρελαιοφόρα και χημικά δεξαμενόπλαια, θα πρέπει να είναι κάτοχαι πιστοπαιητικού βασικής εκπαίδευσης των λειτουργιών φορτίου των πετρελαιοφόρων και χημικών δεξαμενόπλαιων.
- 2 Κάθε υποψήφιος για πιστοποίηση στη βασική εκπαίδευση των λειτουργίων φορτίου των πετρελαιοφόρων και χημικών δεξαμενόπλαιων θα πρέπει να έχει ολοκληρώσει την βασική εκπαίδευση σύμφωνα με τις διατάξεις του τμήματος Α-V/1 του Κώδικα STCW και θα πρέπει να έχει συμπληρώσε:
  - .1 τουλάχιστον τρεις μήνες εγκεκριμένη θαλάσσια υπηρεσία σε πετρελαιοφόρα και χημικά δεξαμενόπλοια και να πληροί το πρότυπο ικανότητας που καθορίζεται στο τμήμα Α-V/1-1, παράγραφος 1 του Κώδικα STCW, ή
  - .2 εγκεκριμένη βασική εκπαίδευση των λειτουργίων φορτίου των πετρελαιοφόρων και χημικών δεξαμενόπλοιων και να πληροί το πρότυπο ικανότητας που καθορίζεται στο τμήμα Α-V/1-1, παράγραφος 1 του Κώδικα STCW.
- 3 Πλοίαρχα, πρώτα μηχανικοί, υποπλοίαρχα, δεύτερα μηχανικοί και κάθε άτομο με άμεση ευθύνη φόρτωσης, εκφόρτωσης και μέριμνα κατά την μεταφορά, χειρισμό φορτίου, καθαρισμό δεξαμενής ή άλλων σχεπικών με το φορτίο λειτουργιών σε πετρελαιοφόρα θα πρέπει να είναι κάτοχαι πιστοπαιητικού προχωρημένης εκπαίδευσης για τις λειτουργίες φορτίου σε πετρελαιοφόρο.
- 4 Κάθε υποψήφιος για πιστοποίηση στην προχωρημένη εκπαίδευση των λειτουργίων φορτίου των πετρελανοφόρων θα;
  - .1 πληροί τις απατήσεις για πιστοποίηση βασικής εκπαίδευσης των λειτουργίων φορτίου των πετρελαιοφόρων και χημικών δεξαμενόπλαιων, και
  - .2 για να έχει τα προσόντα για πιστοποίηση βασικής εκπαίδευσης των λειτουργίων φορτίου των πετρελαιοφόρων και χημικών δεξαμενόπλοιων, θα έχει:
    - .2.1 τουλάχιστον τρεις μήνες εγκεκριμένη θαλάσσια υπηρεσία σε πετρελαιοφόρα, ή
    - .2.2 τουλάχιστον ένα μήνα εγκεκριμένης επί πλοίου εκπαίδευ<u>σης</u> σε πετρελαιοφόρα, σε υπεράρθμη ειδικότητα, που περιλαμβάνει τουλάχιστον τρεις λειτουργίες φόρτωσης και τρεις εκφόρτωσης και θα είναι καταχωρημένη σε εγκεκριμένο βιβλίο αρχείου εκπαίδευσης, λαμβάνοντας υπόψη την οδηγία στο τμήμα Β-V/1, και
  - .3 θα έχει ολοκληρώσει προχωρημένη εκπαίδευση των λειτουργίων φορτίου των πετρελαιοφόρων και θα πληροί το πρότυπο ικανότητας που καθορίζεται στο τμήμα Α-V/1-1, παράγραφος 2 του Κώδικα STCW.
- 5 Πλοίαρχα, πρώτα μηχανικοί, υποπλοίαρχα, δεύτερα μηχανικοί και κάθε άτομο με άμεση ευθύνη φόρτωσης, εκφόρτωσης, μέριμνα κατά την μεταφορά, χειρισμό φορτίου, καθαρισμό δεξαμενής ή άλλων σχετικών με το φορτίο λειτουργιών σε χημικά δεξαμενόπλαια θα πρέπει να είναι κάτοχαι πιστοποιητικού προχωρημένης εκπαίδευσης για τις λειτουργίες φορτίου σε χημικά δεξαμενόπλαια.
- 6 Κάθε υποψήφιος για πιστοποίηση προχωρημένης εκπαίδευσης των λειτουργιών φορτίου των χημικών δεξαμενόπλοιων θα:
  - .1 πληροί τις απαιτήσεις για πιστοποίηση βασικής εκπαίδευσης των λειτουργιών φορτίου των πετρελαιοφόρων και χημικών δεξαμενόπλαιων, και

- .2 για να έχει τα προσόντα για πιστοποίηση βασικής εκπαίδευσης των λειτουργιών φορτίου των πετρελαιοφόρων και χημικών δεξαμενόπλαιων, θα έχει:
  - .2.1 τουλάχιστον τρεις μήνες εγκεκριμένη θαλάσσια υπηρεσία σε χημικά δεξαμενόπλοια, ή
  - .2.2 τουλάχιστον ένα μήνα εγκέκριμένης επί πλοίου εκπαίδευσης σε χημικά δεξαμενόπλαα, σε υπεράριθμη ειδικότητα, που περιλαμβάνει τουλάχιστον τρεις λειτουργίες φόρτωσης και τρεις εκφόρτωσης και θα είναι καταχωρημένη σε εγκεκριμένο βιβλίο αρχείου εκπαίδευσης, λαμβάνοντας υπόψη την οδηγία στο τμήμα Β-V/1, και
- .3 θα έχει ολοκληρώσει προχωρημένη εκπαίδευση των λειτουργιών φορτίου των χημικών δεξαμενόπλαιων και θα πληροί το πρότυπο ικανότητας που καθορίζεται στο τμήμα Α-V/1-1, παράγραφος 3 του Κώδικα STCW.
- 7 Οι Αρχές θα εξασφαλίσουν ότι εκδίδεται πιστοπαιητικό επάρκειας σε ναυτικούς, που έχουν τα προσόντα σύμφωνα με τις παραγράφους 2, 4 ή 6 αντίσταιχα, ή ότι ένα υφιστάμενο πιστοπαιητικό εκανότητας ή πιστοπαιητικό επάρκειας είναι κατάλληλα θεωρημένο.

Κανονισμός VI1-2 Υποχρεωπκές ελάχιστες απαιτήσεις εκπαίδευσης και προσόντων πλοιάρχων, αξιωμαπκών και μελών πληρώματος σε υγραεριοφόρα δεξαμενόπλοια.

- 1 Αξωματικοί και μέλη πληρώματος που τους ανατίθενται συγκεκριμένα καθήκοντα και ευθύνες που σχετίζονται με το φορτίο ή με τα μέσα φορτοεκφόρτωσης σε **υγραεριοφόρα δεξαμενόπλοια**, θα πρέπει να είναι κάτοχαι πιστοπαιητικού βασικής εκπαίδευσης των λειτουργιών φορτίου των υγραεριοφόρων.
- 2 Κάθε υποψήφιος για πιστοποίηση στη βασική εκπαίδευση των λειτουργίων φορτίου των υγραεριοφόρων θα πρέπει να έχει ολοκληρώσει την βασική εκπαίδευση σύμφωνα με τις διατάξεις του τμήματος Α-V/1 του Κώδικα STCW και θα πρέπει να έχει συμπληρώσει:
  - .1 τουλάχιστον τρεις μήνες εγκεκριμένη θαλάσσια υπηρεσία σε υγραεριοφόρα, και να πληροί το πρότυπο ικανότητας που καθορίζεται στο τμήμα Α- V/1-2, παράγραφος 1 του Κώδικα STCW, ή
  - .2 εγκεκριμένη βασική εκπαίδευση των λειτουργίων φορτίου των υγραεριοφόρων, και να πληροί το πρότυπο ικανότητας που καθορίζεται στο τμήμα Α- V/1-2, παράγραφος 1 του Κώδικα STCW.
- 3 Πλοίαρχα, πρώτα μηχανικοί, υποπλοίαρχα, δεύτερα μηχανικοί και κάθε άτομο με άμεση ευθύνη φόρτωσης, εκφόρτωσης, μέριμνα κατά την μεταφορά, χειρισμό φορτίου, καθαρισμό δεξαμενής ή άλλων σχειικών με το φορτίο λειτουργιών σε υγραεριοφόρα θα πρέπει να είναι κάτοχαι πιστοπαιητικού προχωρημένης εκπαίδευσης για τις λειτουργίες φορτίου σε υγραεριοφόρο.
- 4 Κάθε υποψήφιος για πιστοποίηση προχωρημένης εκπαίδευσης των λειτουργίων φορτίου των υγραεριοφόρων θα:
  - .1 πληροί τις απαιτήσεις για πιστοποίηση βασικής εκπαίδευσης των λειτουργίων φορτίου των υγραεριοφόρων, και
  - .2 για να έχει τα προσόντα για πιστοποίηση βασικής εκπαίδευσης των λειτουργίων φορτίου σε υγραεριοφόρα, θα έχει:
    - .2.1 τουλάχιστον τρεις μήνες εγκεκριμένη θαλάσσια υπηρεσία σε υγραεριοφόρα, ή
    - .2.2 τουλάχιστον ένα μήνα εγκεκριμένης επί πλοίου εκπαίδευσης σε υγραεριοφόρα, σε υπεράρθμη ειδικότητα, που περιλαμβάνει τουλάχιστον τρεις λειτουργίες φόρτωσης και τρεις εκφόρτωσης και θα είναι καταχωρημένη σε εγκεκριμένο βιβλίο αρχείου εκπαίδευσης, λαμβάνοντας υπόψη την οδηγία στο τμήμα Β-V/1, και
  - .3 θα έχει ολοκληρώσει προχωρημένη εκπαίδευση των λειτουργίων φορτίου των υγραεριοφόρων και θα πληροί το πρότυπο ικανότητας που καθορίζεται στο τμήμα Α- V/1-2, παράγραφος 2 του Κώδικα STCW.

5 Οι Αρχές θα εξασφαλίσουν όπ εκδίδεται πιστοπαιητικό επάρκειας σε ναυτικούς, που έχουν τα προσόντα σύμφωνα με τις παραγράφους 2 ή 4 αντίσταχα, ή όπ ένα υφιστάμενο πιστοπαιητικό ικανότητας ή πιστοπαιητικό επάρκειας είναι κατάλληλα θεωρημένο.

# Κανονισμός V/2

Υποχρεωτικές ελάχιστες απαιτήσεις για την εκπαίδευση και τα προσόντα πλοιάρχων, αξιωματικών, μελών πληρώματος και λοιπού προσωτικού σε επιβατηγά πλοία

- 1 Ο κανονισμός αυτός ισχύει για τους πλοιάρχους, αξιωματικούς και μέλη πληρώματος και λαπό προσωπικό που υπηρετεί σε επιβατηγά πλοία που εκτελούν διεθνείς πλόες. Οι Αρχές θα προσδιορίσουν την εφαρμογή αυτών των απαιτήσεων σε προσωπικό που υπηρετεί σε επιβατηγά πλοία που εκτελούν πλόες στο εσωτερικό της χώρας.
- 2 Προτού τους ανατεθούν καθήκοντα σε επιβατηγά πλοία, α ναυτικοί θα έχουν ολοκληρώσει την εκπαίδευση που απαιτείται στις παρακάτω παραγράφους 4 έως 7, ανάλογα με την ειδικότητα, τα καθήκοντα και τις ευθύνες τους.
- 3 Οι ναυπκοί που απαιτείται να εκπαιδεύονται σύμφωνα με τις παρακάτω παραγράφους 4, 6 και 7, σε χρονικά διαστήματα που δεν θα είναι μεγαλύτερα των πέντε ετών, θα λαμβάνουν κατάλληλη εκπαίδευση εκσυγχρονισμού γνώσεων ή θα παρέχουν σταιχεία ότι έχουν επιτύχει το απαιτούμενο πρότυπο ικανότητας εντός των προηγούμενων πέντε ετών.
- 4 Πλοίαρχα, αξωματικοί και λαιπό προσωπικό που έχει καθορισθεί στον πίνακα συγκέντρωσης διαίρεσης πληρώματος για να βοηθούν επιβάτες σε καταστάσεις ανάγκης σε επιβατηγά πλοία, θα έχουν ολοκληρώσει την εκπαίδευση στην διαχείριση πλήθους όπως καθορίζεται στο τμήμα Α-V/2, παράγραφος 1 του Κώδικα STCW.
- 5 Προσωπικό που παρέχει άμεση εξυπηρέτηση σε επιβάτες στους χώρους επιβατών, σε επιβατηγά πλοία, θα έχει ολοκληρώσει την εκπαίδευση ασφαλείας (safety) που καθορίζεται στο τμήμα A-V/2, παράγραφος 2 του Κώδικα STCW.
- 6 Πλοίαρχα, υποπλοίαρχα, πρώτα μηχανικοί, δεύτερα μηχανικοί και κάθε άτομο που έχει την ευθύνη για την ασφάλεια των επιβατών σε καταστάσεις ανάγκης σε επιβατηγά πλοία. Θα έχουν ολοκληρώσει εγκεκριμένη εκπαίδευση στον χειρισμό κρίσιμων καταστάσεων και ανθρώπινης συμπεριφοράς όπως καθορίζεται στο τμήμα Α-V/2, παράγραφος 3 του Κώδικα STCW.
- 7 Πλοίαρχα, υποπλοίαρχα, πρώται μηχανικοί, δεύτεραι μηχανικοί και κάθε άτομο στο οποίο έχει ανατεθεί η άμεση ευθύνη επιβίβασης και αποβίβασης επιβατών, φόρτωσης, εκφόρτωσης ή ασφάλισης φορτίου, ή κλείσιμο των αναγμάτων του σκάφους σε επιβατηγά πλοία Ro-Ro, θα έχουν ολοκληρώσει εγκεκριμένη εκπαίδευση όσον αφορά την ασφάλεια των επιβατών, του φορτίου και την ακεραιότητα του σκάφους όπως καθορίζεται στο τμήμα A-V/2, παράγραφος 4 του Κώδικα STCW.
- 8 Οι Αρχές θα εξασφαλίσουν ότι θα εκδίδονται αποδεικτικά σταιχεία εκπαίδευσης σε κάθε άτομο που διαπισώνεται ότι διαθέτει τα προσόντα σύμφωνα με τις διατάξεις αυτού του κανονισμού.

### ΚΕΦΑΛΑΙΟ VI

# Κατάσταση ανάγκης, επαγγελματική ασφάλεια, προστασία (security), ιατρική φροντίδα και αρμοδιότητες/ λειτουργίες επιβίωσης

Κανονισμός VI/1

Υποχρεωπκές ελάχιστες απαιτήσεις για εξοικείωση σε θέματα ασφαλείας (safety), βασική εκπαίδευση και **ο- δηγίες** για όλους τους ναυπκούς

- 1 Οι ναυτικοί θα υποστούν εξοικείωση σε θέματα ασφαλείας (safety) και βασική εκπαίδευση ή οδηγίες σύμφωνα με το τμήμα Α-VI/1 του Κώδικα STCW και θα πληρούν το κατάλληλο πρότυπο εκανότητας που εδώ καθορίζεται.
- 2 Όταν η βασική εκπαίδευση δεν συμπεριλαμβάνεται στα προσόντα για το πιστοποιητικό που εκδίδεται, ένα πιστοποιητικό επάρκειας θα εκδίδεται, με το οποίο θα πιστοπαιείται όπι ο κάτοχος παρακολούθησε κύκλο βασικής εκπαίδευσης.

Κανονισμός VI/2

Υποχρεωτικές ελάχιστες απαιτήσεις για την έκδοση πιστοποιητικών επάρκειας σε σκάφη επιβίωσης, λέμβους διάσωσης και ταχύπλοες λέμβους διάσωσης

- 1 Κάθε υποψήφιος για πιστοποίηση ικανότητας σε σκάφη επιβίωσης και λέμβους διάσωσης εκτός από εκείνες που είναι ταχύπλοες λέμβοι διάσωσης:
  - .1 δεν θα είναι ηλικίας μικρότερης των 18 ετών,
  - .2 θα διαθέτει εγκεκριμένη θαλάσσια υπηρεσία όχι μικρότερη των 12 μηνών ή θα έχει παρακολουθήσει εγκεκριμένο κύκλο εκπαίδευσης και θα διαθέτει εγκεκριμένη θαλάσσια υπηρεσία τουλάχιστον έξι μηνών, και
  - .3 θα πληροί τα πρότυπα≀κανότητας για πιστοπιαητικά επάρκειας σε σκάφη επιβίωσης και λέμβους διάσωσης που καθορίζονται στο τμήμα Α-VI/2 παράγραφα 1 έως 4 του Κώδικα STCW.
- 2 Κάθε υποψήφιος για πιστοποίηση επάρκειας σε ταχύπλοες λέμβους διάσωσης:
  - .1 θα είναι κάτοχος πιστοποιητικού επάρκειας σε σκάφη επιβίωσης και σε λέμβους διάσωσης που δεν είναι ταχύπλοες λέμβοι διάσωσης.
  - .2 θα έχει παρακολουθήσει εγκεκριμένο κύκλο εκπαίδευσης, και
  - .3 θα πληροί το πρότυπο ικανότητας για πιστοποιητικά επάρκειας σε ταχύπλοες λέμβους διάσωσης που καθορίζεται στο τμήμα Α-VI/2 παράγραφα 7 έως 10 του Κώδικα STCW.

Κανονισμός VI/3

Υποχρεωπκές ελάχιστες απαιτήσεις εκπαίδευσης σε προχωρημένου επιπέδου πυρόσβεση

- 1 Ναυτικοί που έχουν οριστεί για τον έλεγχο διαδικασιών πυρόσβεσης θα έχουν ολοκληρώσει με επιτυχία προχωρημένου επιπέδου εκπαίδευση σε τεχνικές πυρόσβεσης με ιδιαίτερη έμφαση στην οργάνωση, χρήση τακτικών και διοίκηση σύμφωνα με τις διατάξεις του τμήματος Α-VI/3, παράγραφα 1 έως 4 του Κώδικα STCW και θα πληρούν το πρότυπο ικανότητας που καθορίζεται εκεί.
- 2 Όπου εκπαίδευση σε προχωρημένου επιπέδου πυρόσβεση δεν περιλαμβάνεται στα προσόντα που απατούνται για την έκδοση πιστοπαιητικού, θα εκδίδεται πιστοπαιητικό επάρκειας, με το οποίο θα πιστοπαιείται ότι ο κάτοχος παρακολούθησε κύκλο εκπαίδευσης σε προχωρημένου επιπέδου πυρόσβεση.

Κανονισμός VI/4

Υποχρεωτικές ελάχιστες απαιτήσεις που έχουν σχέση με ιατρικές πρώτες βοήθειες και ιατρική φροντίδα

- 1 Ναυτικοί στους οποίους έχει ανατεθεί η παροχή ιατρικών πρώτων βοηθειών σε πλοίο θα πληρούν το πρότυπο εκανότητας σε ιατρικές πρώτες βοήθειες που καθορίζεται στο τμήμα Α-VI/4 παράγραφοι 1 έως 3 του Κώδικα STCW.
- 2 Ναυπκοί στους οποίους έχουν ανατεθεί καθήκοντα παροχής ιατρικής φροντίδας σε πλοίο θα πληρούν το πρότυπο ικανότητας για ιατρική φροντίδα σε πλοία που καθορίζεται στο τμήμα Α-VI/4, παράγραφοι 4 έως 6 του Κώδικα STCW.
- 3 Όπου εκπαίδευση σε ιατρικές πρώτες βοήθειες ή ιατρική φροντίδα δεν περιλαμβάνεται στα απαιτούμενα προσόντα για έκδοση πιστοπαιητικού, θα εκδίδεται πιστοπαιητικό επάρκειας, με το οποίο θα πιστοπαιείται ότι ο κάτοχος παρακολούθησε κύκλο εκπαίδευσης σε ιατρικές πρώτες βοήθειες ή σε ιατρική φροντίδα.

Κανονισμός VI/5

Υποχρεωτικές ελάχιστες απαιτήσεις για την έκδοση πιστοποιητικών επάρκειας για Αξιωματικούς Ασφάλειας Πλοίου

- 1 Κάθε υποψήφιος για πιστοπαιητικό επάρκειας Αξιωματικού Ασφάλειας Πλοίου πρέπει:
  - .1 να έχει εγκεκριμένη θαλάσσια υπηρεσία όχι μικρότερη των 12 μηνών ή κατάλληλο διάστημα θαλάσσιας υπηρεσίας και γνώση της λειτουργίας του πλοίου, και
  - .2 να πληροί τα πρότυπα ικανότητας για την πιστοποίησή του ως Αξιωματικός Ασφάλειας Πλοίου, τα οποία καθορίζονται στο τμήμα Α-VI/5, παράγραφοι 1 έως 4 του Κώδικα STCW.
- 2 Η Διοίκηση πρέπει να εξασφαλίζει ότι σε κάθε άτομο που έχει διαπιστωθεί ότι έχει τα προσόντα που καθορίζονται από τις διατάξεις αυτού του κανονισμού θα εκδίδεται πιστοποιητικό επάρκειας.

Κανονισμός VI/6

Υποχρεωτικές ελάχιστες απαιτήσεις για εκπαίδευση σχετική με την ασφάλεια (security) και οδηγίες για όλους τους ναυτικούς

- 1 Οι ναυτικοί θα αποκτήσουν εξακείωση σχετική με την ασφάλεια (security) και εκπαίδευση γνώσης ασφάλειας (security) ή οδηγίες σύμφωνα με το τμήμα Α-VI/6, παράγραφοι 1 έως 4 του Κώδικα STCW και θα πληρούν το κατάλληλο πρότυπο ικανότητας που σε αυτό καθορίζεται.
- 2 Όπου η γνώση ασφάλειας (security) δεν περιλαμβάνεται στα προσόντα που απαιτούνται για την έκδοση πιστοπαιητικού, θα εκδίδεται πιστοπαιητικό επάρκειας, με το οποίο θα πιστοπαιείται ότι ο κάτοχος παρακολούθησε κύκλο εκπαίδευσης γνώσης ασφάλειας (security).
- 3 Κάθε Μέρος θα συγκρίνει την σχετική με την ασφάλεια (security) εκπαίδευση ή τις οδηγίες που απαιτούνται από τους ναυτικούς που έχουν τα προσόντα ή μπορούν να τα αποδείξουν εγγράφως πριν την έναρξη ισχύος αυτού του κανονισμού, με εκείνα που καθορίζονται στο τμήμα Α-VI/6, παράγραφος 4 του Κώδικα STCW, και θα αποφασίζει αν υπάρχει ανάγκη αναβάθμισης των προσόντων αυτών των ναυτικών.

# Ναυτικοί στους οποίους έχουν ανατεθεί καθήκοντα ασφαλείας (security)

- 4 Ναυτικοί στους οποίους έχουν ανατεθεί καθήκοντα ασφαλείας (security) θα πληρούν το πρότυπο ικανότητας που καθορίζεται στο τμήμα Α-VI/6, παράγραφοι 6 έως 8 του Κώδικα STCW.
- 5 Όπου εκπαίδευση σε καθορισμένα καθήκοντα ασφαλείας (security) δεν περιλαμβάνεται στα απαιτούμενα προσόντα για έκδοση τιιστοπαιητικού, θα εκδίδεται πιστοπαιητικό επάρκειας, με το οποίο θα πιστοπαιείται ότι ο κάτοχος παρακολούθησε κύκλο εκπαίδευσης σε καθορισμένα καθήκοντα ασφαλείας (security).
- 6 Κάθε Μέρος θα συγκρίνει τα πρότυπα εκπαίδευσης ασφαλείας (security) που απαιτούνται από τους ναυτκούς με καθορισμένα καθήκοντα ασφαλείας (security), που έχουν τα προσόντα ή μπορούν να τα αποδείξουν εγγράφως πριν την έναρξη ισχύος αυτού του κανονισμού, με εκείνα που καθορίζονται στο τμήμα Α-Vi/6, παράγραφος 8 του Κώδικα STCW, και θα αποφασίζει αν υπάρχει ανάγκη αναβάθμισης των προσόντων αυτών των ναυτικών.

### ΚΕΦΑΛΑΙΟ VII

# Εναλλακτική πιστοποίηση

### Κανονισμός VII/1

Έκδοση εναλλακτικών πιστοποιητικών

- 1 Παρά τις απαιτήσεις πιστοποίησης που καθορίζονται στα κεφάλαια ΙΙ και ΙΙΙ αυτού του Παραρτήματος, τα Μέρη μπορούν να επιλέξουν να εκδώσουν ή να εξουσιοδοτήσουν την έκδοση πιστοποιητικών άλλων από εκείνα που αναφέρονται στους κανονισμούς αυτών των κεφαλαίων με την προϋπόθεση ότι:
  - .1 οι συναφείς αρμοδιότητες και τα επίπεδα ευθύνης που θα αναφέρονται στα πιστοποιητικά και στις θεωρήσεις επιλέγονται και είναι πανομαιότυπα αυτών που εμφανίζονται στα μέρη Α-ΙΙ/1, Α-ΙΙ/2, Α-ΙΙ/3, Α-ΙΙ/4, Α-ΙΙ/5, Α-ΙΙΙ/1, Α-ΙΙΙ/2, Α-ΙΙΙ/5 και Α-ΙV/2 του Κώδικα STCW.
  - .2 οι υποψήφιοι θα έχουν ολοκληρώσει εγκεκριμένη εκπαίδευση και άσκηση και πληρούν τις απαιτήσεις των προτύπων ικανότητας, που ορίζονται στα σχετικά μέρη του Κώδικα STCW, και όπως καθορίζονται στο τμήμα Α-VII/1 αυτού του Κώδικα, για τις αρμοδιότητες και τα επίπεδα που θα αναφέρονται στα πιστοποιητικά και στις θεωρήσεις.
  - .3 α υποψήφιοι θα έχουν ολοκληρώσει εγκεκριμένη θαλάσσια υπηρεσία κατάλληλη για την εκτέλεση των καθηκόντων και επιπέδων που θα αναφέρονται στο πιστοποιητικό. Η ελάχιστη διάρκεια της θαλάσσιας υπηρεσίας θα είναι ισοδύναμη με τη διάρκεια της θαλάσσιας υπηρεσίας που ορίζεται στα κεφάλαια ΙΙ και ΙΙΙ του παρόντος Παραρτήματος. Εν τούταις, η ελάχιστη διάρκεια της θαλάσσιας υπηρεσίας δεν θα είναι μικρότερη από αυτή που ορίζεται στο τμήμα Α-VII/2 του Κώδικα STCW.
  - .4 οι υποψήφιοι για πιστοποίηση που πρόκειται να εκτελέσουν καθήκοντα ναυσιπλοΐας σε επιχειρησιακό επίπεδο θα πληρούν τις ισχύουσες απαιτήσεις των κανονισμών του κεφαλαίου IV, κατά περίπτωση, για την εκτέλεση των καθορισμένων καθηκόντων ραδιοεπικαινωνιών σύμφωνα με τους Κανονισμούς Ραδιοεπικαινωνιών, και
  - .5 τα πιστοποιητικά θα εκδίδονται σύμφωνα με τις απαιτήσεις του κανονισμού Ι/2 και τις διατάξεις που καθορίζονται στο κεφάλαιο VII του Κώδικα STCW.
- 2 Δεν θα εκδοθεί πιστοποιητικό σύμφωνα με αυτό το κεφάλαιο εκτός εάν το Μέρος έχει δώσει πληροφορίες στον Οργανισμό σύμφωνα με το άρθρο IV και τον κανονισμό I/7.

### Κανονισμός VII/2

Πιστοποίηση ναυτικών

Κάθε ναυτικός που εκτελεί οπαιοδήποτε καθήκον ή ομάδα καθηκόντων που καθορίζονται στους πίνακες Α-ΙΙ/1, Α-ΙΙ/2, Α-ΙΙ/3,Α-ΙΙ/4 ή Α-ΙΙ/5 του κεφαλαίου ΙΙ ή των πινάκων Α-ΙΙΙ/1, Α-ΙΙΙ/2, Α-ΙΙΙ/3, Α-ΙΙΙ/4 ή Α-ΙΙΙ/5 του κεφαλαίου ΙΙ ή Α-ΙΙ/2 του κεφαλαίου ΙΙ του Κώδικα STCW θα κατέχει πιστοπαιητικό ικανότητας ή πιστοπαιητικό επάρκειας, κατά περίπτωση.

# Κανονισμός VII/3

Αρχές που διέπουν την έκδοση εναλλακτικών πιστοποιητικών

- 1 Οπαιοδήποτε Μέρος επιλέγει να εκδώσει ή να εξουσιοδοτεί την έκδοση εναλλακτικών πιστοπαιητικών θα εξασφαλίσει ότι τηρούνται οι παρακάτω αρχές:
  - .1 δεν θα εφαρμόζεται κανένα σύστημα εναλλακτικής πιστοποίησης εκτός εάν εξασφαλίζει βαθμό ασφαλείας στην θάλασσα τουλάχιστον ισοδύναμο με αυτό που προβλέπεται στα άλλα κεφάλαια και έχει προληπτική σημασία όσον αφορά την ρύπανση, και
  - .2 οπαιαδήποτε ρύθμιση για εναλλακτική πιστοποίηση που γίνεται σύμφωνα με αυτό το κεφάλαιο θα προβλέπει την ανταλλαθμότητα πιστοπαιητικών με εκείνα που εκδίνονται σύμφωνα με τα άλλα κεφάλαια.

- 2 Η αρχή της ανταλλαξιμότητας της παραγράφου 1 θα εξασφαλίζει όπ:
  - 1 πιστοπαιούμεναι ναυτικοί σύμφωνα με τις ρυθμίσεις των κεφαλαίων ΙΙ και ή ΙΙΙ και εκείναι που πιστοπαιήθηκαν σύμφωνα με το κεφάλαιο VII θα είναι σε θέση να υπηρετήσουν σε πλοία τα οποία διαθέτουν είτε παραδοσιακό είτε άλλους τύπους οργάνωσης, και
  - .2 ναυτικοί δεν θα εκπαιδεύονται σε συγκεκριμένες διατάξεις που επικρατούν σε πλοίο κατά τέταο τρόπον που να βλάψει την δυνατότητα τους να χρησιμοπαιήσουν τις ικανότητές τους αλλού.
- 3 Κατά την έκδοση οπαιουδήποτε πιστοπαιητικού σύμφωνα με τις διατάξεις αυτού του κεφαλαίου θα λαμβάνονται υπόψη α παρακάτω αρχές:
  - .1 Η έκδοση εναλλακτικών πιστοπαητικών δεν θα χρησιμοπαηθεί αυτή καθ' αυτή:
    - .1.1 για να μειωθεί ο αριθμός των μελών του πληρώματος επί του πλοίου,
    - .1.2 για να μειώσει την ακεραιότητα του επαγγέλματος ή "να μειώσει τα προσόντα" των ναυτικών, ή
    - .1.3 να δικαιολογήσει την ανάθεση συνδυασμένων καθηκόντων αξιωματικών φυλακής μηχανής και τήρησης φυλακής γεφύρας σε κάτοχο ενός και μόνου πιστοπαιητηκού κατά τη διάρκεια οποιασδήποτε φυλακής, και
  - .2 το άτομο που έχει την διοίκηση θα ορίζεται ως πλοίαρχος, και η νομική θέση και εξουσία του πλοιάρχου και άλλων δεν θα επηρεάζεται δυσμενώς από την εφαρμογή οποιασδήποτε ρύθμισης εναλλακτικής πιστοποίησης.
- 4 Οι αρχές που περιέχονται στις παραγράφους 1 και 2 αυτού του κανονισμού θα εξασφαλίζουν ότι διατηρείται η ικανότης τόσο των αξιωματικών καταστρώματος όσο και μηχανής.

### ΚΕΦΑΛΑΙΟ VIII

# Τήρηση φυλακής

Κανονισμός VIII/1

Καταλληλότητα προς άσκηση καθηκόντων

- 1 Κάθε Διοίκηση, με σκοπό την πρόληψη κόπωσης:
  - .1 θα θεσπίσει και θέσει σε ισχύ διαστήματα ανάπαυσης για το προσωπικό που εκτελεί φυλακή και εκείνους των οποίων τα καθήκοντα που τους έχουν ανατεθεί είναι σχετικά με την ασφάλεια (safety), ασφάλεια (security) και την αποφυγή ρύπανσης σύμφωνα με τις διατάξεις του τμήματος Α-VIII/1 του Κώδικα STCW, και
  - .2 θα απαιτήσει όπως το σύστημα τήρησης φυλακών ρυθμίζεται κατά τέταιο τρόπο ούτως ώστε η αποδοτικότητα όλου του προσωπικού που εκτελεί φυλακή να μην βλάπτεται λόγω κόπωσης και ότι τα καθήκονται θα οργανώνονται κατά τέταιο τρόπο ούτως ώστε οι εκτελούντες την πρώτη φυλακή κατά την έναρξη πλου και εκείναι των επομένων φυλακών να έχουν επαρκώς αναπαυθεί και να είναι από κάθε άποψη κατάλληλοι για να αναλάβουν καθήκοντα.
- 2 Κάθε Διοίκηση, με σκοπό την αποφυγή κατάχρησης αλκοολούχων και ναρκωτικών ουσιών, θα εξασφαλίζει ότι έχουν ληφθεί επαρκή μέτρα σύμφωνα με τις διατάξεις του τμήματος Α-VIII/1, λαμβάνοντας υπόψη την οδηγία που δίνεται στο τμήμα Β-VIII/1 του Κώδικα STCW.

Κανονισμός VIII/2

Ρυθμίσεις τήρησης φυλακής και αρχές που πρέπει να τηρούνται

- 1 Οι Αρχές θα εφιστούν την προσοχή των εταιριών, πλοιάρχων, πρώτων μηχανικών και όλου του προσωπικού που εκτελεί φυλακή σε ό,τι αφορά τις απαιτήσεις, αρχές και οδηγίες, όπως καθορίζονται στον Κώδικα STCW, που πρέπει να λαμβάνονται υπόψη ώστε να εξασφαλισθεί ότι συνέχής ασφαλής φυλακή ή φυλακές, ανάλογα με τις επικρατούσες συνθήκες και καταστάσεις, τηρούνται πάντοτε σε όλα τα ποντοπόρα πλοία.
- 2 Οι Διακήσεις θα απαιτούν όπως ο πλοίαρχος κάθε πλοίου εξασφαλίζει όπ α ρυθμίσεις τήρησης φυλακής είναι επαρκείς για να τηρηθεί ασφαλής φυλακή ή φυλακές, λαμβάνοντας υπόψη πις επικρατούσεις συνθήκες και καταστάσεις και όπ, υπό την γενική διεύθυνση του πλαιάρχου:
  - .1 αξιωματικοί υπεύθυνοι φυλακής ναυσιπλοΐας θα είναι υπεύθυνοι πάντοτε για την ασφαλή ναυσιπλοΐα του πλοίου κατά την διάρκεια εκτέλεσης των καθηκόντων, όταν θα είναι οι ίδιοι παρόντες στην γέφυρα ναυσιπλοΐας ή βρίσκονται σε χώρο που θα είναι άμεσα γειτικάζων, όπως το δωμάπο χαρτών ή η γέφυρα,
  - .2 χειριστές ραδιοετικανωνών θα είναι υπεύθυνα για την τήρηση συνεχούς φυλακής ραδιοετικανωνών σε κατάλληλες συχνότητες κατά την διάρκεια εκτέλεσης της υπηρεσίας,
  - .3 αξιωματικοί υπεύθυναι φυλακής μηχανοστασίου, σύμφωνα με τα προβλεπόμενα στον Κώδικα STCW και υπό την διεύθυνση του πρώτου μηχανικού, θα είναι άμεσα διαθέσιμα και σε εταιμότητα για παρακολούθηση των χώρων μηχανοστασίου και, όταν απαιτείται, θα είναι παρόντες στο χώρο μηχανών κατά την διάρκεια της περιόδου ευθύνης τους,
  - .4 κατάλληλη και αποτελεσματική φυλακή ή φυλακές τηρούνται πάντοτε με σκοπό την ασφάλεια, όταν το πλοίο είναι αγκυροβολημένο ή παραβεβλημένο και, εάν το πλοίο φέρει επικίνδυνο φορτίο, για την οργάνωση τέταιας φυλακής ή φυλακών θα λαμβάνεται σοβαρά υπόψη η φύση, ποσότητα, συσκευασία και σταιβασία του επικίνδυνου φορτίου και οι οποιεσδήποτε ειδικές συνθήκες που επικρατούν στο πλοίο, στην θαλάσσια περιοχή ή στην ξηρά, και
  - .5 κατά περίπτωση, κατάλληλη και αποτελεσματική φυλακή ή φυλακές τηρούνται με σκοπό την ασφάλεια (security).

# ΑΠΟΦΑΣΗ 2

# Οι τροποποιήσεις της Διάσκεψης της Μανίλα στον Κώδικα Εκπαίδευσης, Έκδοσης πιστοποιητικών και Τήρησης φυλακής Ναυτικών (STCW)

# Η ΔΙΑΣΚΕΨΗ ΤΟΥ 2010 ΣΤΗ ΜΑΝΙΛΑ,

ΕΧΟΝΤΑΣ ΥΙΟΘΕΤΗΣΕΙ την απόφαση 1 σχετικά με την αποδοχή των τροποπαήσεων της Μανίλα, στο παράρτημα της Διεθνούς Σύμβασης για τα Πρότυπα Εκπαίδευσης, Έκδοσης Πιστοπαιητικών και Τήρησης Φυλακών για τους Ναυτικούς, 1978,

ΑΝΑΓΝΩΡΙΖΟΝΤΑΣ την σπουδαιότητα καθιέρωσης υποχρεωτικών τυποπαιημένων αναλυτικών προτύπων ικανότητας και άλλες υποχρεωτικές απαιτήσεις που είναι απαραίτητες ώστε να διασφαλιστεί ότι όλοι οι ναυτικοί εκπαιδεύονται και ασκούνται κατάλληλα, έχουν επαρκή εμπειρία, και είναι ικανοί να ασκήσουν τα καθήκοντά τους με τρόπο που διασφαλίζει την ασφάλεια της ζωής και της περιουσίας στην θάλασσα και την προστασία του θαλασσίου περιβάλλοντος,

ΑΝΑΓΝΩΡΙΖΟΝΤΑΣ ΕΠΙΣΗΣ την αναγκαιότητα της έγκαιρης αλλαγής τέτοιων υποχρεωτικών προτύπων και προβλέψεων ώστε να ανταποκρθούμε αποτελεσματικά στις αλλαγές τεχνολογίας, λειτουργιών και πρακτικών και διαδικασιών που εφαρμόζονται επί των πλοίων,

ΛΑΜΒΑΝΟΝΤΑΣ ΥΠ' ΟΨΙΝ οπ ένα μεγάλο ποσοστό ναυτικών ατυχημάτων και περιστατικών θαλάσσιας ρύπανσης προκαλούνται από ανθρώπινα λάθη,

ΑΝΑΓΝΩΡΙΖΟΝΤΑΣ ότι ένας ασφαλής τρόπος μείωσης των κινδύνων που προκαλούνται από ανθρώπινα λάθη στη διαχείρηση των πλοίων είναι η εξασφάλιση των υψηλότερων κατά το δυνατό προτύπων εκπαίδευσης, πιστοποίησης και ικανότητας των ναυτικών που απασχολούνται ή θα απασχοληθούν σε αυτά τα πλοία,

ΕΠΙΘΥΜΟΝΤΑΣ να επιτευχθεί και να διατηρηθεί το υψηλότερο δυνατό επίπεδο ασφάλειας της ζωής, της περιουσίας και της ασφάλειας (security) στην θάλασσα και στο λιμάνι και να προστατεύσουμε το θαλάσσιο περιβάλλον,

ΕΧΟΝΤΑΣ ΛΑΒΕΙ ΥΠ' ΟΨΊΝ τις τροποποιήσεις στον Κώδικα Εκπαίδευσης, Έκδοσης Πιστοποιητικών και Τήρησης Φυλακών (STCW), που αποτελείται από το μέρος Α - Υποχρεωτικά πρότυπα αναφορικά με τις προβλέψεις του παραρτήματος της σύμβασης STCW 1978, όπως τροποποιήθηκε, και το μέρος Β - Συνιστώμενες οδηγίες αναφορικά με τις προβλέψεις της Σύμβασης STCW 1978, όπως τροποποιήθηκε, προτάθηκε και κυκλοφόρησε σε όλα τα μέλη του Οργανισμού και τα Μέρη της Σύμβασης.

ΣΗΜΕΙΩΝΟΝΤΑΣ ότι ο κανονισμός Ι/1, παράγραφος 2, του παραρτήματος της Σύμβασης STCW του 1978 προβλέπει ότι α τροποπαιήσεις στο μέρος Α του Κώδικα STCW θα υιοθετηθούν, θα τεθούν σε ισχύ και θα εφαρμοστούν σύμφωνα με τις διατάξεις του άρθρου ΧΙΙ της Σύμβασης, σχετικά με τη διαδικασία τροποποίησης που ισχύουν για το παράρτημα,

ΕΧΟΝΤΑΣ ΛΑΒΕΙ ΥΠ' ΟΨΙΝ τις τροποποιήσεις στον Κώδικα STCW που προτάθηκαν και κοινοποιήθηκαν στα μέλη του Οργανισμού και τα Μέρη της Σύμβασης,

- 1. ΥΙΟΘΕΤΕΙ τις τροποπαιήσεις στον Κώδικα Εκπαίδευσης, Έκδοσης πιστοπαιητικών και Τήρησης Φυλακής Ναυτικών (STCW), που εμφανίζεται στο παράρτημα της παρούσας απόφασης,
- 2. ΠΡΟΣΔΙΟΡΙΖΕΙ, σύμφωνα με το άρθρο ΧΙΙ(1)(a)(vii) της Σύμβασης, ότι οι τροποποιήσεις στο μέρος Α του Κώδικα STCW, θα θεωρηθεί ότι έχουν γίνει αποδεκτές την 1η Ιουλίου 2011, εκτός αν, πριν από αυτή την ημερομηνία, περισσότερα από το ένα τρίτο των Μερών στης Σύμβασης ή Μέρη, των οποίων το συνολικό μέγεθος των στόλων τους αποτελεί όχι λιγότερο από το 50% της χωρητικότητας του παγκοσμίου στόλου που αποτελείται από πλοία χωρητικότητας άνω των 100 ο.χ ή μεγαλυτέρων, έχουν ενημερώσει τον Γενικό Γραμματέα ότι διαφωνούν με τις τροποποιήσεις.

- 3. ΠΡΟΣΚΑΛΕΙ τα Μέρη να σημειώσουν ότι, σύμφωνα με το άρθρο XII(1)(a)(ix) της Σύμβασης, α τροποποιήσεις στο μέρος Α του Κώδικα STCW, που περιέχονται στην παρούσα, θα τεθούν σε εφαρμογή την 1<sup>η</sup> Ιανουαρίου 2012, εφ' όσον θεωρηθεί οτι έχουν γίνει αποδεκτές σύμφωνα με την παραπάνω παράγραφο 2,
- 4. ΣΥΝΙΣΤΑ όπ α οδηγίες του μέρους Β της σύμβασης STCW, όπως τροποπαιήθηκε, θα πρέπει να ληφθούν υπ' όψιν από όλα τα Μέρη της Σύμβασης STCW 1978, από την ημερομηνία εφαρμογής των τροποπαιήσεων του μέρους Α του Κώδικα STCW,
- 5. ΖΗΤΑ από την Επιτροπή Ναυτικής Ασφάλειας να τηρεί τον Κώδικα STCW υπό αναθεώρηση και να τον τροποπαιεί όπου είναι απαραίτητο,
- 6. ΕΠΙΣΗΣ ΖΗΤΑ από το Γενικό Γραμματέα του Οργανισμού να διαβιβάσει σε όλα τα Μέρη της Σύμβασης επικυρωμένα αντίγραφα της παρούσας Απόφασης και το κείμενο των τροποποιήσεων του Κώδικα STCW που περιλαμβάνονται στο παράρτημα,
- 7. ΕΠΙΠΛΕΟΝ ΖΗΤΑ από το Γενικό Γραμματέα να διαβιβάσει αντίγραφα της απόφασης και του παραρτήματος σε όλα τα Μέλη του Οργανισμού που δεν είναι Μέρη της Σύμβασης.

#### ПАРАРТНМА

# ΟΙ ΤΡΟΠΟΠΟΙΉΣΕΙΣ ΤΗΣ ΔΙΑΣΚΕΨΉΣ ΤΗΣ ΜΑΝΙΛΑ ΣΤΟΝ ΚΩΔΙΚΆ ΕΚΠΑΙΔΕΎΣΗΣ, ΕΚΔΟΣΉΣ ΠΙΣΤΟΠΟΙΗΤΙΚΏΝ ΚΑΙ ΤΗΡΗΣΉΣ ΦΥΛΑΚΉΣ ΤΩΝ ΝΑΥΤΙΚΏΝ (STCW)

 Το μέρος Α του Κώδικα Εκπαίδευσης, Έκδοσης Πιστοποιητικών και Τήρησης Φυλακής των Ναυτικών (STCW) αντικαθίσταται από το ακόλουθο;

### «ΜΕΡΟΣ Α»

# Υποχρεωτικά πρότυπα όσον αφορά τις διατάξεις του παραρτήματος της σύμβασης STCW

### ΕΙΣΑΓΩΓΗ

- 1 Το μέρος αυτό του Κώδικα STCW περιέχει υποχρεωτικές διατάξεις για τις οποίες γίνεται συγκεκριμένη μνεία στο Παράρτημα της Διεθνούς Σύμβασης περί Προτύπων Εκπαίδευσης, Έκδοσης πιστοπαιητικών και Τήρησης Φυλακής για Ναυτικούς του 1978, όπως τροποποιήθηκε, και που στο εξής θα αναφέρεται ως η Σύμβαση STCW. Οι διατάξεις περιέχουν λεπτομερώς τα ελάχιστα απαιτούμενα πρότυπα που απαιτείται να τηρούνται από τα Μέρη προκειμένου ναι είναι δυνατή η πλήρης και ορθή εφαρμογή της Σύμβασης.
- 2 Επίσης, στο μέρος αυτό περιέχοντα τα πρότυπα ικανότητας που απατείται να επιδεκνύονται από τους υποψηφίους για την χορήγηση και ανανέωση των πιστοποιητικών ικανότητας σύμφωνα με τις διατάξεις της Σύμβασης STCW. Για να διευκρινιστεί σαφώς ή σχέση μεταξύ των διατάξεων περί εναλλακτικής πιστοποίησης του κεφαλαίου VII και των διατάξεων πιστοποίησης των κεφαλαίων II, III και IV, οι ικανότητες που καθορίζονται στα πρότυπα ικανότητας ομαδοπαιούνται ανάλογαι στους παρακάτω επιά τομείς καθηκόντων:
  - .1 Ναυσιπλοΐα
  - .2 Χειρισμός φορτίου και στα βασία
  - .3 Ελεγχος λειτουργίας του πλοίου και μέριμνα επιβαινόντων
  - .4 Ναυτική Μηχανολογία
  - .5 Ηλεκτρολογία, ηλεκτρονικά και έλεγχος
  - .6 Επισκευή και συντήρηση
  - .7 Ραδιοεπικοινωνίες

# στα ακόλουθα επίπεδα ευθύνης:

- .1 Επίπεδο Διοίκησης.
- .2 Επίπεδο Επιχειρησιακό.
- .3 Επίπεδο υποστήριξης.

Καθήκοντα και επίπεδα ευθύνης ορίζονται με υπόπτλο στους πίνακες περί προτύπων ικανότητας που παρατίθενται στα κεφάλαια ΙΙ, ΙΙΙ και ΙV, αυτού του μέρους. Ο αντικειμενικός σκοπός κάθε καθήκοντος σε οποιοδήποτε επίπεδο ευθύνης αναφέρεται στους υποτίτλους ορίζεται από τις ικανότητες που παρατίθενται στην στήλη 1 του πίνακα αυτού. Η ένναια του "καθήκοντος" και του "επιπέδου ευθύνης" ορίζεται στην γενική ορολογία στο τυήμα Α-Ι/1 παρακάτω.

3 Η αρίθμηση των τμημάτων αυτού του μέρους είναι αντίσταχη με την αρίθμηση των κανονισμών που περιέχονται στο Παράρτημα της Σύμβασης STCW. Το κείμενο των τμημάτων αυτού το μέρους μπορεί να διαιρεθεί σε αριθμημένα υποτμήματα και παραγράφους, αλλά αυτή η αρίθμηση ισχύει αποκλειστικά και μόνο γι' αυτό το κείμενο.

### ΚΕΦΑΛΑΙΟ 1

# Πρότυπα όσον αφορά τις γενικές διατάξεις

# Τμήμα Α-Ι/1

Ορισμοί και διευκρινίσεις

- 1 Οι ορισμοί και διευκρινίσεις που περιέχονται στο άρθρο ΙΙ του κανονισμού Ι/1 ισχύουν εξ ίσου στους όρους που χρησιμοποιούνται στα μέρη Α και Β αυτού του Κώδικα. Πρόσθετα, οι παρακάτω συμπληρωματικοί ορσμοίτσχύουν μόνο για αυτό τον Κώδικα.
  - .1 "Πρότυπο ικανότητας" σημαίνει το επίπεδο ικανότητας που πρέπει να επιτευχθεί για την σωστή εκτέλεση των καθηκόντων στο πλοίο σύμφωνα με τα διεθνώς συμφωνηθέντα κριτήρια όπως ορίζοντα εδώ και ενσωματώνουν τα οριζόμενα πρότυπα ή επίπεδα γνώσεων, κατανόησης και δεικνυομένων δεξιοτήτων,
  - .2 "Διοικηπκό επίπεδο" σημαίνει το επίπεδο ευθύνης που σχετίζεται με:
    - .2.1 την υπηρεσία ως πλοίαρχος, ύπαρχος, πρώτος μηχανικός ή δεύτερος μηχανικός σε ποντοπόρο πλοίο, κα
    - .2.2 την εξασφάλιση ότι όλα τα καθήκοντα εντός της καθορισμένης περιοχής ευθύνης εκτελούνται κανονικά,
  - .3 "Επιχειρησιακό επίπεδο" σημαίνει το επίπεδο ευθύνης που σχετίζεται με:
    - .3.1 την υπηρεσία σαν αξιωματικός υπεύθυνος φυλακής γεφύρας ή μηχανοστασίου ή σαν οριζόμενος αξιωματικός υπηρεσίας σε περιοδικά ανεπάνδρωτο μηχανοστάσιο ή σαν χειριστής ραδιοεπικοινωνιών σε ποντοπόρο πλοίο, και
    - .3.2 την διατήρηση άμεσου ελέγχου στην εκτέλεση όλων των καθηκόντων συγκεκριμένης περιοχής ευθύνης σύμφωνα με τις κατάλληλες διαδικασίες και υπό την διεύθυνση ατόμου που υπηρετεί σε διαικητικό επίπεδο στην συγκεκριμένη περιοχή ευθύνης.
  - .4 "Επίπεδο υποστήριξης" σημαίνει το επίπεδο ευθύνης που σχετίζεται με την εκτέλεση ανατεθέντων εργασιών, καθηκόντων ή ευθυνών σε ποντοπόρο πλοίο υπό την διεύθυνση ατόμου που υπηρετεί σε επιχειρησιακό ή διακητικό επίπεδο,
  - .5 "Κριτήρια αξιολόγησης" είναι οι εγγραφές που εμφανίζονται στην στήλη 4 των πινάκων περί "Προδιαγραφών Ελάχιστων Προτύπων Ικανότητας" του μέρους Α και παρέχουν τα μέσα στον αξιολογητή να κρίνει κατά πόσον ένας υποψήφιος μπορεί να εκτελεί τις σχετικές εργασίες, καθήκοντα και ευθύνες, και
  - .6 "Ανεξάρτητη αξιολόγηση" σημαίνει αξιολόγηση από άτομα που διαθέτουν τα κατάλληλα προσόντα, και που είναι ανεξάρτητα από ή βρίσκονται εκτός της μονάδας ή δραστηριότητας που πρόκειται να αξιολογηθεί, για να αξακριβώσουν ότι οι διακητικές και λειτουργικές διαδικασίες σε όλα τα επίπεδα διαχειρίζονται, οργανώνονται, αναλαμβάνονται και παρακολουθούνται εσωτερικά προκειμένου να εξασφαλισθεί η καταλληλότητά τους για τον επιδιωκόμενο σκοπό και την επίτευξη των καθορισθέντων αντικειμενικών σκοπών.

# Τμήμα Α-Ι/2

Πιστοποιητικά και θεωρήσεις

1 Όπου, όπως προβλέπεται στον κανονισμό I/2, παράγραφος 6, η απαιτούμενη θεώρηση από το άρθρο VI της Σύμβασης ενσωματώνεται στο κείμενο του ίδιου του πιστοπικητικού, το πιστοπιαητικό θα εκδίδεται σύμφωνα με τον τύπο που ακολουθεί, με την προυπόθεση ότι οι λέξεις "ή έως την ημερομηνία λήξης οπαιασδήποτε παράτασης ισχύος του πιστοπιαητικού αυτού που ενδεχομένως φαίνεται στην επόμενη σελίδα" θα εμφανίζονται στην πρώτη σελίδα του εντύπου και οι διατάξεις καταχώρησης της παράτασης ισχύος που εμφανίζονται στο πίσω τμήμα του εντύπου θα παραλείπονται όπου απαιτείται αντικατάσταση του πιστοπιαητικού όταν λήξει. Οδηγίες σχετικά με την συμπλήρωση του εντύπου δίνονται στο τμήμα B-I/2 αυτού του Κώδικα.

# (ΧΩΡΑ)

ΠΙΣΤΟΠΟΙΗΤΙΚΌ ΠΟΥ ΕΚΔΟΘΉΚΕ ΣΎΜΦΩΝΑ ΜΕ ΤΙΣ ΔΙΑΤΑΞΕΊΣ ΤΗΣ ΔΙΈΘΝΟΥΣ ΣΎΜΒΑΣΗΣ ΠΕΡΙ ΠΡΟΤΥΠΩΝ ΕΚΠΑΙΔΕΎΣΗΣ, ΠΙΣΤΟΠΟΙΉΣΗΣ ΚΑΙ ΤΗΡΉΣΗΣ ΦΥΛΑΚΉΣ ΝΑΥΤΙΚΏΝ ΤΟΥ 1978, ΟΠΏΣ ΤΡΟΠΟΠΟΙΗΘΗΚΕ

προσόντα σύμφωνα με τις διατο	άξεις του κανονισμού κτελεί τα παρακάτω καθήκ νονται υέχριή μέχρι	της ανωτέρω Σύμβασης όπως τροποπαήθηκε, οντα στα επίπεδα που καθορίζονται, υποκείμενος την ημερομηνία λήξης οποιασδήποτε παράτασης ιίνεται στην πίσω σελίδα.
ΛΕΙΤΟΥΡΓΙΑ	ΕΠΙΠΕΔΟ	ΠΕΡΙΟΡΙΣΜΟΙ (ΑΝ ΥΠΑΡΧΟΥΝ)
		Ε Ε Ε Ε Ε Ε Ε Ε Ε Ε Ε Ε Ε Ε Ε Ε Ε Ε Ε
Ο νόμιμος κάτοχος αυτού του π που καθορίζονται στις ισχύουσε	ιστοπαιήσεις ασφαλούς επε ες απαιτήσεις ασφαλούς επε	τηρετεί υπό την παρακάτω ειδικότητα ή ειδικότητες άνδρωσης της Αρχής:
ΕΙΔΙΚΟΤΗΤΑ		ΙΟΡΙΣΜΟΙ (ΕΑΝ ΥΠΑΡΧΟΥΝ)
	1	
Πιστοποιητικό υπ' αριθμ (Επίσημη Σφραγίδα)	εκδόθηκε την	(Επίσημη σφραγίδα)
	Υπον	γραφή κατάλληλα εξουσιοδοτημένου αξιωματούχου
	C	ονομα κατάλληλα εξουσιοδοτημένου αξιωματουχου
γραφος 11 της Σύμβασης ενώ ι	υπηρετεί στο πλοιο.	ι διαθέσιμο σύμφωνα με τον κανονισμό Ι/2 παρά-
Ημερομηνία γέννησης του κατά	χου του πιστοπαηπκού	
Υπογραφή κατόχου του πιστοτ	ταηπκού	
Φωτογραφία κατόχου του πιστ	οπαητικού	

Ητσχύς αυτού του πιστοποιητικού επεκτείνει	rαι έως
(Επίσημη σφραγίδα)	
	Υπογραφή εξουσιοδοτημένου αξιωματούχου
Ημερομηνία ανανέωσης	
	·
	Ονομα εξουσιοδοτημένου αξιωματούχου
Ηταχύς αυτού του πιστοπαιητικού επεκτείνει	rα έως
(Επίσημη σφραγίδα)	
	Υπογραφή εξουσιοδοτημένου αξιωματούχου
Ημερομηνία ανανέωσης	
	Ονομα εξουσιοδοτημένου αξιωματούχου

2. Με εξαίρεση τις διατάξεις της παραγράφου 1, το έντυπο που χρησιμοποιείται για να βεβαιώσει την έκδοση πιστοποιητικού θα είναι οπως αυτό που φαίνεται παρακάτω, με την προϋπόθεση ότι οι λέξεις "ή έως την ημερομηνία λήξης της οποίας ανανέωσης της ισχύος αυτής της θεώρησης που ενδεχομένως παρατίθεται στην επόμενη σελίδα" εμφανίζονται στην πρώτη σελίδα του εντύπου και το τμήμα καταχώρησης της ανανέωσης της ισχύος που παρατίθεται στην τελευταία σελίδα του εντύπου θα παραλείπεται όπου η θεώρηση πρέπει να αντικατασταθεί όταν λήξει. Οδηγίες όσον αφορά την συμπλήρωση του εντύπου δίνονται στο τμήμα Β-1/2 αυτού του Κώδικα.

# (ΧΩΡΑ)

ΘΕΩΡΉΣΗ ΠΟΥ ΒΕΒΑΙΩΝΕΙ ΤΗΝ ΕΚΔΟΣΗ ΠΙΣΤΟΠΟΙΗΤΙΚΟΥ ΣΥΜΦΩΝΑ ΜΕ ΤΙΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΔΙΕ
ΘΝΟΥΣ ΣΥΜΒΑΣΉΣ ΠΕΡΙ ΠΡΟΤΥΠΩΝ ΕΚΠΑΙΔΕΥΣΉΣ, ΠΙΣΤΟΠΟΙΉΣΗΣ ΚΑΙ ΤΗΡΉΣΗΣ ΦΥΛΑΚΉΣ ΤΩΙ
ΝΑΥΤΙΚΩΝ ΤΟΥ 1978 ΟΠΩΣ ΤΡΟΠΟΠΟΙΗΘΗΚΕ

Η Κυβέρνηση της	πσ ποίος ε	τοποιεί ότ υιοέθει να	το πιστοπαητικό υπ. αριθ διαθέτει τα προσόντα σύμφωνα με τις	έχει εκδοθεί στον διατάξεις του κανον
σμούτης ανωτέρω τουργίες, στα επίπεδα που	Σύμβασης ( καθορίζον ιερομηνία <i>)</i>	όπως τροτ ται υποκεί  \ήξης της (	ισασετά τα προσόντα σομφωνά με πς ισποιήθηκε, και ευρέθη ικανός να εκτε. ιενος στους όποιους περιορισμούς πο ύποιας ανανέωσης της ισχύος αυτής τι	λεί τις παρακάτω λει- ου παρατίθενται μέχρι
ΛΕΙΤΟΥΡΓΙΑ	ЕПІ	ΤΕΔΟ	ΠΕΡΙΟΡΙΣΜΟΙ (ΕΑΝ ΥΠΑΡΧ	(OYN)
Ο νόμιμος κάτοχος αυτού το καθορίζεται στις απαιτήσεις			Ι ορεί να υπηρετεί υπό την παρακάτωτδι ης της Αρχής:	ί ότητα ή ιδιότητες που
EIAIKOTHTA	<b>\</b>		ΠΕΡΙΟΡΙΣΜΟΙ (ΕΑΝ ΥΠΑΡΧΟ)	/N)
Θεώρηση υπ.αριθμ		ΕΙ	ιδόθηκε την	
(Επίσημη σφραγίδα)				
			Υπογραφή εξουσιοδοτι	ημένου αξιωματούχου
			Ονομα εξουσοδοτι	ημένου αξιωματουχου
Το πρωτότυπο αυτής της θ 11 της Σύμβασης ενώ υπηρ			ίναι διαθέσιμο σύμφωνα με τον κανονι	σμό Ι/2, παράγραφος
Ημερομηνία γέννησης του κ	ατόχου του	ποτοποι	πκού	
Υπογραφή κατόχου του πισ	τοπαητικοι	ύ		
Φωτογραφία κατόχου του τ	πστοποιηπ	KOÚ		

Η ισχύς αυτής της θεώρησης επεκτεί	νετα έως
Επίσημη σφραγίδα)	· · · · · · · · · · · · · · · · · · ·
	Υπογραφή εξουσιοδοτημένου αξιωματούχου
Ημερομηνία ανανέωσης	·································
	Όνομα εξουσιοδοτημένου αξιωματούχου
Ητσχύς αυτής της θεώρησης επεκτεί (Επίσημη σφραγίδα)	ίνεται έως
(Emorphi oxportion)	 Υπογραφή εξουσιοδοτημένου αβωματούχου
Ημερομηνία ανανέωσης	
	 Όνομα εξουσιοδοτημένου αξιωματούχου

<sup>3</sup> Το έντυπο που χρησιμοποιείται για να πιστοπαιήσει την αναγνώριση ενός πιστοπαιητικού φαίνεται παρακάτω, με εξαίρεση ότι οι λέξεις "ή έως την ημερομηνία λήξης της όποιας ανανέωσης της ισχύος αυτής της θεώρησης που ενδεχομένως μνημονεύεται στην πίσω σελίδα" που εμφανίζεται στην πρώτη σελίδα του εντύπου και οι διατάξεις καταγραφής της ανανέωσης της ισχύος που εμφανίζεται στην πίσω σελίδα του εντύπου θα παραλείπονται όταν η θεώρηση πρέπει να αντικατασταθεί όταν λήξει. Οδηγίες όσον αφορά την συμπλήρωση του εντύπου περιέχονται στο τμήμα Β-l/2 αυτού του Κώδικα.

### (ΧΩΡΑ)

ΘΕΩΡΗΣΗ ΠΟΥ ΒΕΒΑΙΩΝΕΙ ΤΗΝ ΑΝΑΓΝΩΡΙΣΗ ΠΙΣΤΟΠΟΙΗΤΙΚΟΥ ΣΥΜΦΩΝΑ ΜΕ ΤΙΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΔΙΕΘΝΟΥΣ ΣΥΜΒΑΣΗΣ ΠΕΡΙ ΠΡΟΤΥΠΩΝ ΕΚΠΑΙΔΕΥΣΗΣ, ΠΙΣΤΟΠΟΙΗΣΗΣ ΚΑΙ ΤΗΡΗΣΗΣ ΦΥ-ΛΑΚΗΣ ΤΩΝ ΝΑΥΤΙΚΩΝ ΤΟΥ 1978 ΟΠΩΣ ΤΡΟΠΟΠΟΙΗΘΗΚΕ

Η Κυβέρνηση της ......πιστοπαεί ότι το Πιστοπαιητικό υπ.αριθμ. ......του εκδόθηκε στον ......από ή για λογαριασμό της Κυβέρνησης της ......είναι αναγνωρισμένο σύμφωνα με τις διατάξεις του κανονισμού Ι/10 της παραπάνω Σύμβασης, όπως τροποπαιήθηκε, και ο νόμιμος κάτοχος

ΛΕΙΤΟΥΡΓΙΑ	ΕΠΙΠΕΔΟ	ΠΕΡΙΟΡΙΣΜΟΙ (ΕΑΝ ΥΠΑΡΧΟΥΝ)
<u> </u>		
πμος κάτοχος αυτής της	ς θεώρησης μπορεί να υ	πηρετήσει υπό την παρακάτω ιδιότητα ή ιδιότηι wans πουμαγώουν από την Αργή
με πςτοχύουσες απαιτ	ίρεις ασφαλούς επανορο	υσης που ισχύουν από την Αρχή.
ΕΙΔΙΚΟΤΗΤΑ		ΠΕΡΙΟΡΙΣΜΟΙ (ΕΑΝ ΥΠΑΡΧΟΥΝ)
Octoor ur acteu		εκδήθηκε την
		menegative with minimum.
(Επίσημη σφραγίδα)		
		Υπογραφή εξουσιοδοτημένου αξιωμ
		Όνομα εξουσιοδοτημένου αξιωμ 
Γο πρωτότυπο αυτής τη φος 11 της Σύμβασης εν	ις θεώρηση πρέπει να εί ιώ υπηρετεί στο πλοίο	 Όνομα εξουσιοδοτημένου αθωμί ίναι διαθέσιμο σύμφωνα με τον κανονισμό 1/2 π
ρος 11 της Σύμβασης εν	νώ υπηρετεί στο πλοίο	
ρος 11 της Σύμβασης εν Ημερομηνία γέννησης το	νώ υπηρετεί στο πλοίο ου κατόχου του πιστοποι	ίναι διαθέσιμο σύμφωνα με τον κανονισμό 1/2 π

Επίσημη σφραγίδα)	
	Υπογραφή εξουσιοδοτημένου αξιωματούχου
Ημερομηνία ανανέωσης	
	·
	Ονομα εξουσιοδοτημένου αξιωματούχου
	Ovoka chonoroguisheren admininten
Ητσχύς αυτής της θεώρησης επεκτείν	
Ητσχύς αυτής της θεώρησης επεκτείνι (Επίσημη σφραγίδα)	
	εται έως Υπογραφή εξουσιοδοτημένου αβωματούχου

- 4 Κατά την χρήση τύπων που μπορεί να είναι διαφορετικοί αυτών που καθορίζονται σε αυτό το τμήμα, σύμφωνα με τον κανονισμό Ι/2, παράγραφος 10, τα Μέρη θα εξασφαλίσουν ότι σε όλες τις περιπτώσεις:
  - .1 όλες α πληροφορίες που έχουν σχέση με την ταυτότητα και την προσωπική περιγραφή του κατόχου, περιλαμβανομένου του ονόματος, ημερομηνίας γέννησης, φωτογραφίας και υπογραφής καθώς επίσης και η ημερομηνία έκδοσης του εγγράφου θα παρατίθενται στην ίδια σελίδα των εγγράφων, και
  - .2 όλες οι πληροφορίες που αναφέρονται στην ιδιότητα ή ιδιότητες υπό τις οποίες ο κάτοχος δικαιούται να υπηρετεί σύμφωνα με τις εφαρμοζόμενες απαιτήσεις ασφαλούς επάνδρωσης της Αρχής, καθώς και οι όποιοι περιορισμοί, θα παρατίθενται εμφανώς και θα εντοπίζονται εύκολα.

# ΕΚΔΟΣΗ ΚΑΙ ΚΑΤΑΧΩΡΗΣΗ ΠΙΣΤΟΠΟΙΗΤΙΚΩΝ

### Έγκριση της θαλάσσιας υπηρεσίας

5 Κατά την έγκριση της θαλάσσιας υπηρεσίας που απαιτείται από τη Σύμβαση, τα Μέρη θα πρέπει να εξασφαλίσουν όπ η εν λόγω υπηρεσία είναι σχεπκή με τα προσόντα που ζητήθηκαν, λαμβάνοντας υπόψη όπ, εκτός από την αρχική εξακείωση με την υπηρεσία σε ποντοπόρα πλοία, ο σκοπός αυτής της υπηρεσίας είναι να επιτρέψει στο ναυτικό να εκπαιδευτεί και να εφαρμόσει, κάτω από κατάλληλη επιτήρηση, ασφαλείς και κατάλληλες θαλάσσιες πρακτικές, διαδικασίες και ρουτίνες, που σχετίζονται με τα προσόντα που απαιτούνται.

# Έγκριση εκπαιδευτικών προγραμμάτων

6 Κατά την έγκριση εκπαιδευτικών μαθημάτων και προγραμμάτων,τα μέρη θα πρέπει να λά βουν υπόψη ότι αι σχετικές πρότυπες σειρές εκπαίδευσης του ΙΜΟ μπορούν να βοηθήσουν στην προεταιμασία τέταιων μαθημάτων και προγραμμάτων, και να εξασφαλίσουν ότι οι λεπτομερείς στόχοι μάθησης που προτείνονται σ' αυτά, καλύπτονται κατάλληλα.

Ηλεκτρονική πρόσβαση στα μητρώα

7 Στη διατήρηση του ηλεκτρονικού μητρώου σύμφωνα με την παράγραφο 15 του κανονισμού Ι/2, θα πρέπει να γίνουν διατάξεις που να επιτρέπουν ελεγχόμενη ηλεκτρονική πρόσβαση σε τέτσιο μητρώο ή μητρώα για να επιτρέπουν στα Μέρη και στις εταιρείες να επιβεβαιώνουν:

- .1 το όνομα του ναυτικού στον οποίο εκδόθηκε τέταιο πιστοπαιητικό, θεώρηση ή άλλο προσόν, το σχετικό του αριθμό, την ημερομηνία εκδοσής και την ημερομηνία λήξης,
- .2 την ειδικότητα με την οποία μπορεί να υπηρετήσει ο κάτοχος και όπαους περιορισμούς επισυνάπτονται εκεί, και
- .3 πς λειτουργίες που μπορεί να εκτελέσει ο κάτοχος, τα εξουσιοδοτημένα επίπεδα και όπαιους περιορισμούς επισυνάπτονται εκεί.

# Ανάπτυξη βάσης δεδομένων για την καταχώριση πιστοποιητικών

- 8 Κατά την εφαρμογή της απαίτησης της παραγράφου 14 του κανονισμού I/2 για την διατήρηση ενός μητρώου πιστοποιητικών και θεωρήσεων, δεν είναι απαραίτητη μια τυποποιημένη βάση δεδομένων με την προϋπόθεση ότι όλες οι σχετικές πληροφορίες είναι καταχωρημένες και διαθέσιμες σύμφωνα με τον κανονισμό I/2.
- 9 Τα ακόλουθα σταχεία πληροφοριών θα πρέπει να είναι καταχωρημένα και διαθέσιμα είτε σε έντυπη είτε σε ηλεκτρονική μορφή σύμφωνα με τον κανονισμό !/2:

# .1 Κατάσταση του πιστοποιητικού

Έγκυρο Υπό αναστολή Ακυρωμένο Δηλωμένο ως απολεσθέν Κατεστραμμένο

να φυλάσσεται με ένα αρχείο των αλλαγών της κατάστασης, συμπεριλαμβανομένων των ημερομηνιών των αλλαγών.

# .2 Λεπτομέρειες του πιστοποιητικού

Ονομα ναυτικού
Ημερομηνία γέννησης
Εθνικότητα
Φύλο
Κατά προτίμηση μια φωτογραφία
Σχετικό αριθμό εγγράφου
Ημερομηνία έκδοσης
Ημερομηνία λήξης
Τελευταία ημερομηνία ανανέωσης
Λεπτομέρειες της εξαίρεσης (εξαιρέσεων)

### .3 Λεπτομέρειες της ικανότητας

STCW πρότυπα της ικανότητας (π.χ κανονισμός II/1). Ειδικότητα Λειτουργία Επίπεδο ευθύνης Θεωρήσεις Περιορισμοί

### .4 Ιατρικές λεπτομέρειες

Η ημερομηνία έκδοσης του τελευταίου ιστρικού πιστοποιητικού να σχετίζεται με την έκδοση ή την ανανέωση του πιστοποιητικού ικανότητας.

#### Τμήμα Α-Ι/3

Αρχές που διέπουν παράκπους πλόες

1 Όταν ένα Μέρος ορίζει τους παράκπους πλόες, μεταξύ άλλων, για το σκοπό της εφαρμογής παραλλαγών των θεμάτων που απαριθμούνται στη στήλη 2 των πινάκων του προτύπου ικανότητας που περιέχονται στα κεφάλαια ΙΙ και ΙΙΙ του μέρους Α του Κώδικα, για την έκδοση έγκυρων πιστοποιητικών για υπηρεσία σε πλοία που φέρουν τη σημαία του Κράτους Μέλους και εκτελούν τέταιους πλόες, πρέπει να λαμβάνονται υπόψη α ακόλουθαι τομείς, υπολογίζοντας τις επιπτώσεις στην ασφάλεια (safety) και την ασφάλεια (security) όλων των πλοίων και του θαλάσσιου περιβάλλοντος:

.1 ο τύπος του πλοίου και το εμπόριο που έχει αναλάβει,

.2 η ολική χωρητικότητα του πλοίου και η ισχύς πρόωσης της κύριας μηχανής σε κιλοβάτ (kilowatt),

.3 η φύση και η διάρκεια των πλόων,

.4 η μέγιστη απόσταση από ένα λιμένα καταφυγής,

.5 η επάρκεια της κάλυψης και η ακρίβεια των συσκευών προσδιορισμού στίγματος ναυσιπλοΐας,

.6 οι καιρικές συνθήκες που συνήθως επικρατούν στην περιοχή των παράκτιων πλόων,

- .7 την παροχή επί του πλοίου και παράκτιων εγκαταστάσεων επικανωνίας για έρευνα και διάσωση,
- .8 τη διαθεσιμότητα υποστήριξης στην ξηρά, ειδικότερα όσον αφορά την τεχνική συντήρηση επί του πλοίου.
- 2 Δεν είναι σκόπιμο τα πλοία που εκτελούν παράκπους πλόες να επεκτείνουν τους πλόες τους παγκοσμίως, με τη δικαιολογία ότι πλέουν σταθερά εντός των καθορισμένων ορίων παράκτιων πλόων των γειτονικών Μερών.

# Τμήμα Α-Ι/4

Διαδικασίες ελέγχου

- 1 Η διαδικασία αξιολόγησης που προβλέπεται στον κανονισμό I/4, παράγραφος 1.3 που είναι αποτέλεσμα των όποιων συμβάντων αναφέρονται εκεί θα έχει σκοπό την εξακρίβωση του γεγονότος ότι μέλη του πληρώματος, που απαιτείται να διαθέτουν επαγγελματικές ικανότητες, διαθέτουν πραγματικά τις απαραίτητες δεξιότητες που είναι σχετικές με το αντίστα χο συμβάν.
- 2 Πρέπει να έχουμε κατά νού, όταν πραγματοπαείται η αξιολόγηση, ότι οι όποιες διαδικασίες επί του πλοίου καθορίζονται από τον Διεθνή Κώδικα Ασφαλούς Διαχείρισης (ISM) και ότι οι διατάξεις αυτής της Σύμβασης περιορίζονται στην εκανότητα ασφαλούς εκτέλεσης των συγκεκριμένων διαδικασιών.
- 3 Οι διαδικασίες ελέγχου σύμφωνα με αυτή την Σύμβαση θα περιορίζονται στα πρότυπα ικανότητας κάθε ενός ναυτικού που επιβαίνει στο πλοίο και τις δεξιότητες τους που είναι σχετικές με την τήρηση φυλακής όπως ορίζεται στο μέρος Α του Κώδικα. Η αξιολόγηση ικανότητας στο πλοίο θα αρχίζει με τον έλεγχο των πιστοποιητικών των ναυτικών.
- 4 Εκτός από τον έλεγχο του πιστοπαιητικού, η αξιολόγηση σύμφωνα με τον κανονισμό 1/4 παράγραφο 1.3 μπορεί να απαιτεί από τον ναυτικό να επιδείξει την σχετική ικανότητα στο χώρο εκτέλεσης των καθηκόντων του. Τέταια επίδειξη μπορεί να περιλαμβάνει την εξακρίβωση ότι οι επιχειρησιακές απαιτήσεις ικανόποιούνται και ότι υπάρχει η κατάλληλη ανταπόκριση σε καταστάσεις ανάγκης ανάλογα με το επίπεδο ικανότητας του ναυτικού.
- 5 Στην αξιολόγηση θα χρησιμοποιούνται μόνο οι μέθοδοι ικανότητας μαζί με τα κριτήρια εκτίμησης της και του στόχου των προτύπων που δίνονται στο μέρος Α αυτού του Κώδικα.
- 6 Αξιολόγηση ικανότητας που σχετίζεται με την ασφάλεια (security), πρέπει να διεξάγεται για εκείνους τους ναυπκούς με συγκεκριμένα καθήκοντα ασφάλειας μόνο στην περίπτωση που υπάρχουν σαφεις λόγοι, όπως προβλέπεται στο κεφάλαιο ΧΙ/2 της Διεθνούς Σύμβασης περί Ασφαλείας της Ανθρώπνης Ζωής στην θάλασσα (SOLAS). Σε όλες τις άλλες περιπτώσεις, θα περιορίζεται στον έλεγχο των πιστοποιητικών και/ ή των θεωρήσεων των ναυτικών.

# Τμήμα Α-Ι/5

Εθνικές διατάξεις

Οι διατάξεις του κανονισμού 1/5 δεν θα ερμηνεύονται ότι παρεμποδίζουν τον καταμερισμό εργασιών για εκπαίδευση υπό επίβλεψη ή σε περιπτώσεις ανωτέρας βίας.

### Μέρος Α-Ι/6

Εκπαίδευση και αξιολόγηση

- 1 Κάθε Κράτος μέλος θα εξασφαλίσει ότι όλη η εκπαίδευση και αξιολόγηση των ναυτικών για πιστοποίηση σύμφωνα με αυτή τη Σύμβαση είναι:
  - .1 δομημένη σύμφωνα με γραπτά προγράμματα,που περιλαμβάνουν μεθόδους και τρόπους παράδοσης, διαδικασίες και υλικό μάθησης που είναι απαραίτητα για να εξασφαλισθεί το καθορισμένο επίπεδο ικανότητας, και

- .2 πραγματοπαιείται, επιτηρείται, αξιολογείται και υποστηρίζεται από προσοντούχα άτομα σύμφωνα με τις παραγράφους 4, 5 και 6.
- 2 Άτομα που πραγματοπαιούν εκπαίδευση ή αξιολόγηση σε πλοίο θα εκτελούν αυτές τις διαδικασίες όταν τέτοια εκπαίδευση ή αξιολόγηση δεν έχει δυσμενείς επιπτώσεις στην κανονική λειτουργία του πλοίου και υπάρχει δυνατότητα να αφιερώσουν τον χρόνο και την προσοχή τους σε εκπαίδευση ή αξιολόγηση.

# Προσόντα εκπαιδευτών, εποπτών και αξιολογούντων\*

3 Κάθε Μέρος θα εξασφάλίσει ότι α εκπαιδευτές, επόπτες και αξιολογούντες έχουν τα κατάλληλα προσόντα για τους συγκεκριμένους τύπους και εττίπεδα εκπαίδευσης ή αξιολόγησης ικανότητας των ναυτικών είτε στο πλοίο είτε στην ξηρά, όπως απαιτείται από την Σύμβαση, σύμφωνα με τις διατάξεις αυτού του τμήματος.

### Εκπαίδευση κατά την υπηρεσία

- 4 Όποιο άτομο εκτελεί εκπαίδευση κατά την υπηρεσία ναυπκού, είτε στο πλοίο είτε στην ξηρά, που προορίζετα να χρησιμοποιηθεί σαν προσόν για πιστοποίηση σύμφωνα με αυτή την Σύμβαση:
  - .1 θα πρέπει να έχει αφομαιώσει το πρόγραμμα εκπαίδευσης και να έχει κατανοήσει τους συγκεκριμένους αντικει μενικούς σκοπούς της εκπαίδευσης για τον συγκεκριμένο τύπο εκπαίδευσης που πραγματοποιείται,
  - .2 να έχει τα προσόντα για την εργασία για την οποία πραγματοπαιείται εκπαίδευση, και
  - .3 αν πραγματοποιεί εκπαίδευση χρησιμοποιώντας προσομοιωτή να:
    - .3.1 έχει λάβει κατάλληλες λειτουργικές και τεχνικές οδηγίες που αφορούν την χρήση προσομαωτών, και
    - .3.2 έχει αποκτήσει πρακτική επιχειρησιακή εμπειρία στον συγκεκριμένο τύπο προσομαιωτή που χρησιμοπαιείται.
- 5 Κάθε άτομο που είναι υπεύθυνο για την επίβλεψη επι του πλοίου εκπαίδευσης ναυτικού, που πρόκειται να χρησιμοπαιηθεί σαν προσόν για πιστοποίηση σύμφωνα με την Σύμβαση, θα πρέπει να έχει κατανοήσει πλήρως τα εκπαίδευτικά προγράμματα και τους συγκεκριμένους αντικειμενικούς σκοπούς για κάθε τύπο εκπαίδευσης που πραγματοπαιείται.

### Αξιολόγηση ικανότητας

- 6 Όποιο άτομο πραγματοποιεί αξιολόγηση ικανότητας κατά την υπηρεσία ναυτικού, είτε στο πλοίο είτε στην ξηρά, που πρόκειται να χρησιμοποιηθεί σαν προσόν για πιστοποίηση σύμφωνα με την Σύμβαση:
  - .1 θα διαθέτει κατάλληλο επίπεδο γνώσεων και κατανόησης της ικανότητας που πρόκειται να αξιολογηθεί,
  - .2 θα διαθέτει τα απαιτούμενα προσόντα για την εργασία για την οποία πραγματοπαείται η αξιολόγηση,
  - .3 θα έχει λάβει τις κατάλληλες οδηγίες όσον αφορά τις μεθόδους και πρακτικές αξιολόγησης,
  - .4 θα έχει αποκτήσει πρακτική εμπειρία αξιολόγησης, και
  - .5 αν πραγματοπαεί αξιολόγηση που περιλαμβάνει τη χρήση προσομαιωτών, θα έχει πρακτική εμπειρία αξιολόγησης στον συγκεκριμένο τύπο προσομαιωτή υπό την επιτήρηση και σε βαθμό που θα . εκανοπαεί έμπειρο αξιολογούντα.

# Εκπαίδευση και αξιολόγηση σε εκπαιδευτικό ίδρυμα

7 Κάθε Μέρος το αποίο αναγνωρίζει κύκλο σπουδών εκπαίδευσης, εκπαιδευτικό ίδρυμα, ή αποδεικτικό που απονέμεται από εκπαιδευτικό ίδρυμα, σαν τμήμα των απαιτήσεών του για την έκδοση πιστοποιητικού που απαιτείται από την Σύμβαση, θα εξασφαλίσει ότι τα προσόντα, και η εμπειρία των εκπαιδευτών και αξιολο-

<sup>·</sup> Ο σχεπκές πρότυπες σειρές εκπαίδευσης IMO μπορεί να βοηθούν στην προεταιμασία των εκπαιδεύσεων.

γούντων καλύπτουν τις ισχύουσες διατάξεις των προτύπων ποιότητας του τμήματος Α-Ι/8. Τέτοια προσόντα, εμπειρία και εφαρμογή των προτύπων ποιότητας θα περιλαμβάνουν την κατάλληλη εκπαίδευση σε τεχνικές ενημέρωσης και μεθόδους εκπαίδευσης, αξιολόγησης και πρακτικής, και θα καλύπτουν πλήρως τις ισχύουσες απαιτήσεις των παραγράφων 4 και 6.

### TMHMA A-I/7

Ανακοίνωση πληροφοριών

1 Οι πληροφορίες που απαιτούνται από τον κανονισμό Ι/7, παράγραφο 1, θα ανακοινώνονται στο Γενικό Γραμματέα με τους τύπους που καθορίζονται στις ακόλουθες παραγράφους.

### ΜΕΡΟΣ 1 – ΑΡΧΙΚΗ ΚΟΙΝΟΠΟΙΗΣΗ ΤΩΝ ΠΛΗΡΟΦΟΡΙΩΝ

- 2 Εντός ενός ημερολογιακού έτους από την έναρξη ισχύος του κανονισμού Ι/7, κάθε Μέρος θα αναφέρει τα μέτρα που έχει λάβει προκειμένου να τεθεί σε πλήρη ισχύ η Σύμβαση. Η αναφορά αυτή θα περιλαμβάνει τα παρακάτω:
  - .1 στοιχεία επικαινωνίας και οργανόγραμμα του υπουργείου, τμήματος ή κυβερνητικού φορέα που είναι υπεύθυνος για την υλοποίηση της Σύμβασης,
  - .2 συνοπτική εξήγηση των νομικών και διοικητικών μέτρων που προβλέπονται και έχουν ληφθεί για να εξασφαλισθεί η συμμόρφωση, ιδιαίτερα με τους κανονισμούς Ι/2, Ι/6 και Ι/9,
  - .3 σαφή δήλωση όσον αφορά τις ρυθμίσεις που έχουν γίνει αναφορικά με την μόρφωση, εκπαίδευση, εξέταση, αξιολόγηση ικανότητας και έκδοση πιστοποιητικών,
  - .4 σύντομη περίληψη των κύκλων σπουδών και προγραμμάτων εκπαίδευσης, περί των εξετάσεων και αξιολογήσεων που προβλέποντα, για κάθε πιστοποιητικό που εκδίδεται σύμφωνα με την Σύμβαση,
  - .5 συνοπτική περιγραφή των διαδικασιών που ακολουθούνται για την εξουσιοδότηση, αποδοχή ή έγκριση εκπαίδευσης και εξετάσεων, καθορισμό υγειονομικής καταλληλότητας και ικανότητας, που απαντούνται από την Σύμβαση, οι συνθήκες που αναφέρονται σε αυτή και κατάλογος των εξουσιοτήσεων, αποδοχών και εγκρίσεων που εδόθησαν,
  - .6 συνοπτική περίληψη των διαδικασιών που ακολουθούνται για απονομή εξαιρέσεων σύμφωνα με το άρθρο VIII της Σύμβασης, και
  - .7 τα αποτελέσματα της σύγκρισης που πραγματοπαείται σύμφωνα με τον κανονισμό I/11 και σαφές περίγραμμα της εκπαίδευσης ανανέωσης και εκσυγχρονισμού γνώσεων που απαιτείται.

### ΜΕΡΟΣ 2 – ΜΕΤΑΓΕΝΕΣΤΕΡΕΣ ΕΚΘΕΣΕΙΣ

- 3 Κάθε Μέρος, εντός-έξι μηνών⊹
  - .1 από την διατήρηση ή αποδοχή των όπαιων ισοδύναμων ρυθμίσεων μόρφωσης ή εκπαίδευσης σύμφωνα με το άρθρο ΙΧ, θα δίνει πλήρη περιγραφή αυτών των ρυθμίσεων,
  - .2 από την αναγνώριση πιστοπαιητικών που εκδόθηκαν από άλλο Μέρος, θα υποβάλλει αναφορά που περιληπτικά θα περιγράφει τα μέτρα που λαμβάνονται για να εξασφαλισθεί συμμόρφωση με τον κανονισμό Ι/10, και
  - .3 από την έγκριση απασχόλησης ναυτικών που διαθέτουν εναλλακτικά πιστοπαιητικά που εκδόθηκαν σύμφωνα με τον κανονισμό VII/1 σε πλοία που φέρουν την σημαία του, θα υποβάλλει στο Γενικό Γραμματέα δείγμα εγγράφου όσον αφορά τον τύπο των εγγράφων ασφαλούς επάνδρωσης που εκδόθηκαν για αυτά τα πλοία.
- 4 Κάθε Μέρος θα αναφέρει τα αποτελέσματα κάθε αξιολόγησης που πραγματοπιαείται σύμφωνα με τον κανονισμό 1/8, παράγραφος 2, εντός έξι μηνών από την ολοκλήρωσή της. Η αναφορά της αξιολόγησης θα περιλαμβάνει τις ακόλουθες πληροφορίες:
  - .1 τα προσόντα και την εμπειρία εκείνων που πραγματοποίησαν την αξιολόγηση, (π.χ. πιστοπαιητικά εκανότητας που έχουν, εμπειρία ως ναυτικοί και ανεξάρτητα αξιολογητές, εμπειρία στον τομέα της ναυ-

πκής εκπαίδευσης και αβολόγησης, εμπειρία στη διαχείριση των συστημάτων πιστοποίησης ή οπαιαδήποτε άλλα προσόντα/ εμπειρία),

- .2 τους όρους αναφοράς για την ανεξάρτητη αξιολόγηση και εκείνους των αξιολογητών,
- .3 μία λίστα των εκπαιδευτικών ιδρυμάτων/ κέντρων που καλύπτονται από την ανεξάρτητη αξιολόγηση, και
- .4 τα αποτελέσματα της ανεξάρτητης αξιολόγησης, συμπεριλαμβανομένου:
  - .1 της επηβεβαίωσης όπ:
    - .1.1 όλες α ισχύουσες διατάξεις της Σύμβασης και του Κώδικα STCW, συμπεριλαμβανομένων των τροποπαιήσεων τους, καλύπτονται από το σύστημα προτύπων παιότητας του κάθε Μέρους σύμφωνα με το τμήμα Α-Ι/8, παράγραφος 3.2, και
    - .1.2 όλα τα μέτρα εσωτερικού διαχειρησιακού ελέγχου και τα μέτρα ελέγχου και α ενέργειες παρακολούθησης, συμμορφώνονται με τις προγραμματισμένες ρυθμίσεις και τις τεκμηρωμένες διαδικασίες και είναι αποτελεσματικά στη διασφάλιση της επίτευξης των καθορισμένων στόχων, σύμφωνα με το τμήμα Α-Ι/8, παράγραφος 3.2,

#### .2 μία σύντομη περιγραφή:

- .2.1 των μη συμμορφώσεων που εντοπίστηκαν κατά την ανεξάρτητη αξιολόγηση, αν υπάρχουν,
- .2.2 των διορθωτικών μέτρων που προτείνονται για την αντιμετώπιση των εντοπισμένων μη συμμορφώσεων, και
- .2.3 των διορθωτικών μέτρων που ελήφθησαν για την αντιμετώπιση των εντοπισμένων μη συμμορφώσεων.
- 5 Τα Μέρη θα πρέπει να αναφέρουν τα μέτρα που έχουν ληφθεί για την εφαρμογή μεταγενέστερων υποχρεωτικών τροποποιήσεων της Σύμβασης και του Κώδικα STCW, που δεν είχαν προηγουμένως περιληφθεί στην αναφορά της αρχικής ανακοίνωσης πληροφοριών σύμφωνα με τον κανονισμό 1/7 ή σε οποιαδήποτε προηγούμενη αναφορά σύμφωνα με τον κανονισμό 1/8. Οι πληροφορίες θα περιληφθούν στην επόμενη αναφορά που ακολουθεί από την έναρξη σε ισχύ της τροποποίησης, σύμφωνα με τον κανονισμό 1/8, παράγραφος 3.
- 6 Οι πληροφορίες των μέτρων που έχουν ληφθεί για την εφαρμογή υποχρεωτικών τροποποιήσεων της Σύμβασης και του Κώδικα STCW θα πρέπει να περιλαμβάνουν τα ακόλουθα, ανάλογα με την περίπτωση:
  - .1 μια συνοπτική εξήγηση των νομικών και διαικητικών μέτρων που προβλέπονται και έχουν ληφθεί για να εξασφαλισθεί η συμμόρφωση με την τροποποίηση,
  - .2 μια σύντομη περίληψη των κύκλων σπουδών και προγραμμάτων εκπαίδευσης, περί των εξετάσεων και αξιολογήσεων που προβλέπονται για να εξασφαλισθεί η συμμόρφωση με την τροποποίηση,
  - .3 μια συνοπτική περιγραφή των διαδικασιών που ακολουθούνται για την εξουσιοδότηση, αποδοχή ή έγκριση εκπαίδευσης και εξετάσεων, καθορισμό υγειονομικής καταλληλότητας και ικανότητας, που απαιτούνται σύμφωνα με την τροποποίηση,
  - .4 ένα σαφές περίγραμμα της εκπαίδευσης ανανέωσης και εκσυγχρονισμού γνώσεων που απατείται για να συμφωνεί με τις τροποπαιήσεις, και
  - .5 μια σύγκριση μεταξύ των μέτρων για την εφαρμογή της τροποποίησης και των υφιστάμενων μέτρων που περιλαμβάνονται στις προηγούμενες αναφορές σύμφωνα με τον κανονισμό 1/7, παράγραφος 1 και/ ή τον κανονισμό 1/8, παράγραφος 2, ανάλογα με την περίπτωση.

# ΜΕΡΟΣ 3- ΟΜΑΔΑ ΑΡΜΟΔΙΩΝ ΑΤΟΜΩΝ

7 Ο Γενικός Γραμματέας θα τηρεί κατάλογο των εξειδικευμένων ατόμων που εγκρίθηκαν από την Επιτροπή Ναυτικής Ασφαλείας, που περιλαμβάνει επίσης εξειδικευμένα άτομα που είναι διαθέσιμα ή συνιστώνται από

τα Κράτη μέλη, που μπορεί να κληθούν να αξιολογήσουν τις αναφορές που υποβλήθηκαν σύμφωνα με τον κανονισμό 1/7 και τον κανονισμό 1/8 και να βοηθήσουν στην προετοιμασία της αναφοράς που απαιτείται από τον κανονισμό 1/7, παράγραφος 2. Αυτά τα άτομα θα είναι συνήθως διαθέσιμα κατά την διάρκεια των σχετικών συνόδων της Επιτροπής Ναυτικής Ασφαλείας η των υπαγομένων σε αυτή φορέων αλλά δεν είναι απαραίτητο να εκτελούν την εργασία τους αποκλειστικά κατά την διάρκεια αυτών των συνόδων.

- 8 Σε σχέση με τον κανονισμό I/7, παράγραφος 2, τα εξειδικευμένα άτομα θα είναι γνώστες των απαιτήσεων της Σύμβασης και τουλάχιστον ένα από αυτά θα έχει γνώση του συστήματος εκπαίδευσης και πιστοποίησης του ενδιαφερομένου Μέρους.
- 9 Όταν μια αναφορά λαμβάνεται από κάθε Μέρος σύμφωνα με τον κανονισμό 1/8 παράγραφος 3, ο Γενικός Γραμματέας θα ορίσει τα αρμόδια άτομα απο τη λίστα που τηρεί σύμφωνα με την παραπάνω παράγραφο 7, για να θεωρήσουν την αναφορά και να παραθέσουν τις απόψεις τους σχετικά με το αν:
  - .1 η αναφορά είναι ολοκληρωμένη και καταδεικνύει ότι το Μέρος έχει προβεί σε ανεξάρτητη αξιολόγηση των γνώσεων, της κατανόησής τους, των δεξιοτήτων και της απόκτησης ικανοτήτων και των ενεργειών αξιολόγησης, και της διαχείρισης του συστήματος πιστοποίησης (συμπεριλαμβανομένης της θεώρησης και ανανέωσης), σύμφωνα με το τμήμα Α-Ι/Β, παράγραφος 3,
  - .2 η αναφορά είναι επαρκής να αποδείξει όπ:
    - .2.1 οι αξιολογητές είχαν τα προσόντα,
    - .2.2 αι όραι της αναφοράς ήταν αρκετά σαφείς ώστε να διασφαλίζουν όπ:
      - .2.2.1 όλες αι ισχύουσες διατάξεις της Σύμβασης και του Κώδικα STCW, συμπεριλαμβανομένων των τροποποιήσεων τους, καλύπτονται από το σύστημα προτύπων παιότητας του Μέρους, και
      - .2.2.2 η υλοποίηση των σαφώς καθορισμένων στόχων, σύμφωνα με τον κανονισμό 1/8, παράγραφος 1, θα μπορούσε να εξακριβωθεί σε όλο το φάσμα των σχετικών δραστηριοτήτων,
    - .2.3 οι διαδικασίες που ακολουθήθηκαν κατά την διάρκεια της ανεξάρτητης αξιολόγησης ήταν κατάλληλες να προσδιορίσουν οποιαδήποτε σημαντική μη συμμόρφωση του συστήματος εκπαίδευσης του Μέρους, της αξιολόγησης ικανότητας και της πιστοποίησης των ναυτικών, όπως μπορεί να εφαρμόζεται στο ενδιαφερόμενο Μέρος,
    - .2.4 α πράξεις που ελήφθησαν για να διορθώσουν οποιαδήποτε μη συμμόρφωση που παρατηρήθηκε, είναι έγκαι ρες και κατάλληλες\*.

# 10 Κάθε συνάντηση των αρμοδίων ατόμων:

- .1 θα πραγματοποιείται κατά την κρίση του Γενικού Γραμματέα,
- .2 θα αποτελείται από μονό αριθμό μελών, συνήθως όχι περισσοτέρων των 5 ατόμων,
- .3 θα ορίζει τον δικό της πρόεδρο, και
- .4 θα δίδει στον Γενικό Γραμματέα την σύμφωνη γνώμη των μελών της, ή αν δεν καταλήξει σε συμφωνία, τις απόψεις τόσο της πλειοψηφίας όσο και της μειοψηφίας.
- 11 Τα αρμόδια άτομα, σε εμπιστευτική βάση, θα παραθέτουν γραπτά τις απόψεις τους:
  - .1 σε σύγκριση των γεγονότων που αναφέρονται στις πληροφορίες που παρέχονται στο Γενικό Γραμματέα από το Κράτος μέλος σε σχέση με τις αντίστοιχες απαιτήσεις της Σύμβασης,
  - .2 στην αναφορά κάθε σχετικής αξιολόγησης που υποβάλλεται σύμφωνα με τον κανονισμό Ι/8, παράγραφος 3,

<sup>΄</sup> Οι διορθωπκές ενέργειες είναι έγκαιρες και κατάλληλες, σημαίνα τις ενέργειες που πρέπει να επικεντρωθούν στην υποοστήριξη των βασικών απών των ελλείψεων και πρέπει να οργανωθεί ωστε να διεξαχθούν σε προκαθορισμένο χρονοδιάγραμμα.

- .3 στην αναφορά των μέτρων που έχουν ληφθεί για την εφαρμογή των τροποπαήσεων της Σύμβασης και του Κώδικα STCW που υποβλήθηκαν στην παράγραφο 5, και
- .4 τις όπαες πρόσθετες πληροφορίες δίνονται από το Μέρος.

## ΜΕΡΟΣ 4- ΑΝΑΦΟΡΑ ΠΡΟΣ ΤΗΝ ΕΠΙΤΡΟΠΗ ΝΑΥΤΙΚΗΣ ΑΣΦΑΛΕΙΑΣ

- 12 Κατά τη σύνταξη της αναφοράς, προς την Επιτροπή Ναυτικής Ασφάλειας, που απαιτείται από τον κανονισμό Ι/7, παράγραφος 2, ο Γενικός Γραμματέας:
  - .1 θα ζητήσει και θα λάβει υπόψη τις απόψεις των εξειδικευμένων ατόμων που επιλέγησαν από τον κατάλογο που συντάχθηκε σύμφωνα με την παράγραφο 7,
  - .2 θα ζητήσει διευκρίνηση όταν αυτό είναι απαραίτητο από το Κράτος μέλος σε οποιοδήποτε θέμα που σχετίζεται με τις πληροφορίες που δίνονται σύμφωνα με τον κανονισμό Ι/7 παράγραφος 1, και
  - .3 θα εντοπίζει οποιαδήποτε περιοχή που το Κράτος μέλος ενδεχομένως έχει ζητήσει βοήθεια για την εφαρμογή της Σύμβασης.
- 13 Το ενδιαφερόμενο Μέρος θα ενημερωθεί για τις ρυθμίσεις όσον αφορά συναντήσεις των αρμοδίων ατόμων, και οι αντιάτομοί του δικαιούνται να παρίστανται για να διευκρινήσουν οποιοδήποτε θέμα σχετίζεται με τις πληροφορίες που έχουν δοθεί σύμφωνα με τον κανονισμό 1/7, παράγραφος 1.
- 14 Αν ο Γενικός Γραμματές δεν είναι σε θέση να υποβάλλει την αναφορά που προβλέπεται από την παράγραφο 2 του κανονισμού Ι/7, το ενδιαφερόμενο Μέρος μπορεί να ζητήσει από την Επιτροπή Ναυτικής Ασφαλείας να λάβει τα μέτρα που προβλέπονται από την παράγραφο 3 του κανονισμού Ι/7, λαμβάνοντας υπόψη τις πληροφορίες που υποβάλλονται σύμφωνα με αυτό το τμήμα και τις απόψεις που εκφράζονται σύμφωνα με τις παραγράφους 10 και 11.

#### TMHMA A-1/8

Πρότυπα Ποιότητας

# Εθνικοί αντικειμενικοί σκοποί και πρότυπα ποιότητας

- 1 Κάθε Μέρος θα εξασφαλίσει ότι οι αντικειμενικοί σκοποί εκπαίδευσης και άσκησης και τα σχετικά πρότυπα ικανότητας που είναι επιβεβλημένο να επιτευχθούν, προσδιορίζονται με σαφήνεια και καθορίζουν τα επιτεδα γνώσεων, κατανόησης και δεξιοτήτων που είναι κατάλληλαι για τις εξετάσεις και αξιολογήσεις που απατούνται σύμφωνα με την Σύμβαση. Οι αντικειμενικοί σκοποί και τα σχετικά πρότυπαι ποιότητας μπορεί να καθορισθούν ξεχωριστά για διαφορετικούς κύκλους οπουδών και προγράμματα εκπαίδευσης και θα επιτρέπουν τον διοικητικό έλεγχο του συστήματος πιστοποίησης.
- 2 Το πεδίο εφαρμογής των προτύπων ποιότητος θα καλύπτα την δίοικηση του συστήματος πιστοποίησης, όλων των κύκλων σπουδών εκπαίδευσης και προγραμμάτων, εξετάσεων και αξιολογήσεων που πραγματοποιόνται από ή κατ' εξουσιοδότηση του Μέρους και των προσόντων και εμπαιρίας που απαιτούνται για τους αξιολογητές και εκπαιδευτές έχοντας υπόψη τις πολιτικές, συστήματα, ελέγχους και τις απαιτούμενες εσωτερικές ρυθμίσας εξασφάλισης της εσωτερικής ποιότητας για να εξασφαλιστεί η επίτευξη των προσδιορισμένων αντικαι μενικών σκοπών.
- 3 Κάθε Μέρος θα εξασφαλίσει ότι, ανεξάρτητη αξιολόγηση των γνώσεων, κατανόησης, κτήσης δεξιστήτων και ικανότητας και των δραστηριστήτων αξιολόγησης καθώς και τον διακητικό έλεγχο του συστήματος πιστοποίησης, πραγματοπαιείται κατά χρονικά διαστήματα που δεν είναι μεγαλύτερα των πέντε ετών για να διαπιστωθεί ότι:
  - .1 όλες α τσχύουσες διατάξεις της Σύμβασης και του Κώδικα STCW, σύμπεριλαμβανομένων των τροποποιήσεών τους, καλύπτονται από το σύστημα πρότυπων παιότητας,
  - .2 όλα τα μέτρα ελέγχου εσωτερικής διοίκησης και παρακολούθησης και οι επακόλουθες ενέργειες συμμορφώνονται με τις προγραμματισμένες ρυθμίσεις και καταγεγραμμένες διαδικασίες, και είναι αποτελεσματικές για την εξασφάλιση επίτευξης των ορισθέντων αντικειμενικών σκοπών,
  - .3 τα αποτελέσματα κάθε ανεξάρτητης αξιολόγησης καταγράφονται και τίθενται υπόψη εκείνων που είναι υπεύθυναι για τον τομέα που αξιολογείται, και

.4 θα γίνονται εγκαίρως α απαραίτητες ενέργειες για την αποκατάσταση των ελλείψεων.

#### TMHMA A-I/9

Ιατρικά πρότυπα

1 Τα Μέρη, κατά την θέστιση προτύπων υψειονομικής καταλληλότητας των ναυτικών, όπως απαιτείται από τον κανονισμό Ι/9, πρέπει να πληρούν τα ελάχιστα πρότυπα όρασης για την υπηρεσία, που ορίζονται στον πίνακα Α-Ι/9 και να λαμβάνουν υπόψη τα κριτήρια φυσικής κατάστασης και υγειονομικής καταλληλότητας που ορίζονται στην παράγραφο 2. Θα πρέπει επίσης να λαμβάνουν υπόψη την οδηγία που δίνεται στο τμήμα Β-Ι/9 αυτού του Κώδικα και τον πίνακα Β-Ι/9 που αφορά την αξιολόγηση των ελάχιστων φυσικών εκανοτήτων.

Αυτά τα πρότυπα μπορούν να διαφοροπισιούνται, στο βαθμό που καθορίζεται από το Μέρος χωρίς επιφύλαξη για την ασφάλεια των ναυτικών ή του πλοίου, ανάμεσα σε εκείνα τα άτομα που ψάχνουν να ξεκινήσουν καριέρα στη θάλασσα και σε εκείνα που ήδη υπηρετούν στη θάλασσα και μεταξύ διαφορετικών αρμοδιοτήτων επί του πλοίου, λαμβάνοντας υπόψη τα διαφορετικά καθήκοντα των ναυτικών. Θα πρέπει επίσης να λαμβάνουν υπόψη οποιαδήποτε αναπηρία ή ασθένεια που θα περιορίσει την ικανότητα του ναυτικού να εκτελέσει αποτελεσματικά τα καθήκοντα του/της κατά τη διάρκεια της περιόδου ισχύος του ιστρικού πιστοποιητικού.

- 2 Τα πρότυπα φυσικής κατάστασης και υγειονομικής καταλληλότητας που θεσπίζονται από το Μέρος θα εξασφαλίζουν ότι α ναυτικοί πληρούν τα ακόλουθα κριτήρια:
  - .1 έχουν τη φυσική εκανότητα, λαμβάνοντας υπόψη την παρακάτω παράγραφο 5, να εκπληρώσουν όλες τις απαιτήσεις της βασικής εκπαίδευσης, όπως απαιτείται από το τμήμα Α-VI/1, παράγραφος 2,
  - .2 επιδεικνύουν επαρκή ακοή και ομιλία για να επικανωνούν αποτελεσματικά και να ανιχνεύουν οποιουσδήποτε ηχητικούς συναγερμούς,
  - .3 δεν έχουν καμία ιατρική πάθηση, διαταραχή ή αναπηρία που θα εμποδίσει την αποτελεσματική και ασφαλή άσκηση των καθηκόντων τους, και των καθηκόντων έκτακτης ανάγκης επί του πλοίου κατά τη διάρκεια της περιόδου ισχύος του ιατρικού πιστοπαιητικού.
  - .4 δεν πάσχει από καμία ιατρική πάθηση η οποία ενδέχεται να επιδεινωθεί κατά την θαλάσσια υπηρεσία ή να καταστήσει τον ναυτικό ακατάλληλο για την εν λόγω υπηρεσία ή να θέσει σε κίνδυνο την υγεία και την ασφάλεια άλλων ατόμων επί του πλοίου, και
  - .5 δεν παίρνουν κάπαιο φάρμακο που έχει παρενέργειες, που θα μειώσει την ικανότητα κρίσης, την ισορροπία, ή οπαιεσδήποτε άλλες απαιτήσεις για την αποτελεσματική και ασφαλή εκτέλεση των συνηθισμένων και των εκτάκτων καθηκόντων επί του πλοίου.
    - 3 Οι ιστρικές εξετάσεις καταλληλότητας των ναυτικών θα πραγματοποιούνται από γιατρούς έμπειρους και με κατάλληλα προσόντα, που αναγνωρίζονται από το \_Μέρος.
    - 4 Κάθε Μέρος θα θεσπίσει διατάξεις για την αναγνώριση των ιατρών. Ένα μητρώο αναγνωρισμένων ιατρών θα διατηρείται από το Μέρος και θα είναι διαθέσιμο στα άλλα Μέρη, στις εταιρείες και τους ναυτικούς, όταν απαιτηθεί.
    - Κάθε Μέρος θα παρέχει οδηγίες για την διεξαγωγή ιατρικών εξετάσεων καταλληλότητας και την έκδοση ιατρικών πιστοποιητικών, λαμβάνοντας υπόψη τις διατάξεις που ορίζονται στο τμήμα Β-Ι/9 αυτού του Κώδικα. Κάθε Μέρος θα καθορίζει το εύρος της διακριτικής ευχέρειας που παρέχεται στους αναγνωρισμένους ιατρούς σχετικά με την εφαρμογή των ιατρικών προτύπων, λαμβάνοντας υπόψη τα διαφορετικά καθήκοντα των ναυτικών, εκτός αυτού δεν θα υπάρχει διακριτική ευχέρεια για όσους έχουν προβλήματα μυωπίας, πρεσβυωπίας και αχρωματοψίας, σχετικά με τα κατώτατα όρια όρασης του πίνακα Α-Ι/9, που απαιτούνται για τους ναυτικούς για να αναλάβουν καθήκοντα οπτήρα στο τμήμα καταστρώματος. Ένα Μέρος μπορεί να επιτρέψει διακριτική ευχέρεια κατά την εφαρμογή αυτών των προτύπων, όσον αφορά τους ναυτικούς του τμήματος μηχανοστασίου, με την προϋπόθεση ότι η συνολική ικανότητα όρασης του ναυτικού πληροί τις απαιτήσεις που ορίζονται στον πίνακα Α-Ι/9.

- Κάθε Μέρος θα θεσπίσει μεθόδους και διαδικασίες που θα επιτρέπουν στους ναυτικούς, α οποίαι ύστερα από εξέταση, δεν πληρούν τα ιατρικά πρότυπα καταλληλότητας ή τους είχε επιβληθεί κάπαιος περιορισμός σχετικά με την ικανότητά τους να εργαστούν, ιδίως ως προς τον χρόνο, το πεδίο εργασιών ή τον εμπορικό τομέα, να αναθεωρήσουν την υπόθεσή τους σύμφωνα με τις διατάξεις προσφυγής του εν λόγω Μέρους.
- 7 Το ιατρικό πιστοποιητικό που προβλέπεται από τον κανονισμό I/9, παράγραφος 3, θα περιλαμβάνει κατ' ελάχιστον τις παρακάτω πληροφορίες:
- .1 Εκδίδουσα αρχή και απαιτήσεις σύμφωνα με τις οποίες εκδόθηκε το έγγραφο

#### .2 Στοιχεία του ναυτικού

- .2.1 Όνομα: (Επίθετο, όνομα, μεσαίο όνομα)
- .2.2 Ημερομηνία γέννησης: (ημέρα/μήνας/έτος)
- .2.3 Φύλο: (Άρρεν/θήλυ)
- .2.4 Εθνικότητα

#### .3 Γνωμάτευση του αναγνωρισμένου ιατρού

- .3.1 Επιβεβαίωση ότι τα έγγραφα ταυτοποίησης ελέγχθηκαν στο σημείο της εξέτασης : ΝΑΙ/ΟΧΙ
- .3.2 Η ακοή πληροί τα πρότυπα του τμήματος Α-Ι/9: ΝΑΙ/ΟΧΙ
- .3.3 Η μη υποβοηθούμενη ακοή είναι (κανοιταιητικής: NAI/OXI
- .3.4 Η οπτική οξύτητα πληροί τα πρότυπα του τμήματος Α-Ι/9: ΝΑΙ/ΟΧΙ
- .3.5 Η αντίληψη των χρωμάτων' πληροί τα πρότυπα του τμήματος Α-Ι/9: ΝΑΙ/ΟΧΙ
  - .3.5.1 Η ημερομηνία της τελευταίας εξέτασης αντίληψης των χρωμάτων
- .3.6 Είναι ικανός για καθήκοντα οπτήρα;: ΝΑΙ/ΟΧΙ
- .3.7 Χωρίς περιορισμούς ή απογορεύσεις στην υγειονομική καταλληλότητα;: NAI/OXI Αν ''ΟΧΙ'' διευκρινήστε τους περιορισμούς ή τις απογορεύσεις.
- .3.8 Ο ναυτικός πάσχει από καμία ιατρική πάθηση η οποία ενδέχεται να επιδεινωθεί κατά την θαλάσσια υπηρεσία ή να τον καταστήσει ακατάλληλο για την εν λόγω υπηρεσία ή να θέσει σε κίνδυνο την υγεία και την ασφάλεια άλλων ατόμων επί του πλοίου;: NAI/OXI
- .3.9 Ημερομηνία εξέτασης; (ημέρα/μήνας/έτος)
- .3.10 Ημερομηνία λήξης του πιστοποιήτικου: (ημέρα/μήνας/έτος)

## .4 Λεπτομέρειες της εκδίδουσας αρχής

- .4.1 Επίσημη σφραγίδα (συμπεριλαμβανομένου του ονόματος) της εκδίδουσας αρχής
- .4.2 Υπογραφή του εξοσιοδοτημένου ατόμου

Σημείωση: Η αφολόγηση της αντίληψης των χρωμάτων πρέπει να πραγματοπαείται κάθε έξι χρόνια.

- .5 Υπογραφή του ναυτικού που να επιβεβαιώνει όπι ο ναυτικός έχει πληροφορηθεί το περιεχόμενο του πιστοποιητικού και το δικαιωμά του για αναθεώρηση σύμφωνα με την παράγραφο 6 του τμήματος A-I/9
- 8 Τα ιατρικά πιστοποιητικά θα είναι στην επίσημη γλώσσα της εκδίδουσας χώρας. Αν η γλώσσα που χρησιμοπαιείται δεν είναι τα Αγγλικά, το κείμενο θα περιλαμβάνει μετάφραση σε αυτή τη γλώσσα.

#### Πίνακας Α-Ι/9

# Τα κατώτατα όρια όρασης για τους ναυτικούς εντός της υπηρεσίας

STCW Κανονισμός Σύμβασης	Κατηγορία Ναυπκού	Υποβοηθού μακανή όραση <sup>1</sup>	μενη	Κονπνή/ Άμμεση όραση	χρωμάτων Αντίληψη	Οππκά πεδία <sup>4</sup>	Νυκτερινή τύφλωση⁴	Δι πλωπία (δι πλή όραση) <sup>4</sup>
·		Ένας οφθαλμός	Ο άλλος οφθαλμός	Κα α δύο οφθαλμοί μαζί, υποβοηθούμενα ή μη υποβοηθούμενα	-			
1/11 11/1 11/2 11/3 11/4	Πλοίσρχα, αξωματικοί καταστρώμ ατος κα μέλη πληρώματο ς που απα τούντα για την ανάληψη καθηκόντων οπτή	0,5 <sup>2</sup>	0,5	Απα τούμενη όραση για την πλοήγηση του πλοίου (π.χ. αναφορά χαρτών κα ναυπκών εκδόσεων,χρήση των οργάνων κα του εξοπλισμού γέφυρας, κα αναγνώριση των βοηθημάτων πλοήγησης)	Βλέπε σημείωση 6	Κανονικά οππικά πεδία	Απαιτούμενη όραση για την εκτέλεση όλων των απαραίτητ ων αρμοά οτήτω ν στο σκοτάδι χωρίς κίνδυνο	Καμία προφανής σημαντική κατάσταση
VII/2 I/11 III/1 III/2 III/3 III/4 III/5 III/6 III/7 VII/2	'Όλα α α αξωματικοί μηχανής,α ηλεκτροτεχν ικοί αξωματικοί, α ηλεκτροτεχν ικοί μέλη πληρώματο ς και απλά μέλη πληρώματο ς ή άλλα που αποτελούν μέρος ενός μηχανοστασ ιίου φυλακής	0,45	0,4 (βλέπε σημείωση 5)	Απα τούμενη όραση για ανάγνωση οργάνων σε κονπνή απόσταση, για λειτουργία εξοπλισμού και αναγνώριση συστημάτων/εξαρτημάτων ,όπως απαιτείται	Βλέπε σημείωση 7	Επαρκή οπικά πεδία	Απαιτούμενη όραση για την εκτέλεση όλων των απαραίτητ ων αρμοδιοτήτω ν στο σκοτάδι χωρίς κίνδυνο	Καμία προφανής σημαντική κατάσταση
I/11 IV/2	GMDSS Χαμστές ραά οεπ - κα νωνών	0,4	0,4	Απα τούμενη όραση για ανόγνωση οργάνων σε κοντινή απόσταση, για λετουργία εξοπλισμού και αναγνώριση συστημάτων/ εξαρτημάτων, όπως απα τείτα	Βλέπε σημείωση 7	Επαρκή οπεκά πεδία	Απα τούμενη όραση για την εκτέλεση όλων των απαραίτητ ων αρμοά οτήτω ν στο σκοτάά χωρίς κίνδυνο	Καμία προφανής σημαντική κατάσταση

#### Σημειώσεις:

1 Οι πμές δίνοντα στη δεκαδική μορφή Snellen.

4 Υπόκε ται σε αφολόγηση από γιατρό εξειά κευμένο σε κλινική όραση, όπως υποδεικνύεται από τα αρχικά πορίσματα της εξέτασης.

5 Το προσωπικό του μηχανοστασίου θα πρέπει να έχει συνολική ικανότητα όρασης τουλάχιστον 0.4.

6 CIE πρότυπα αντίληψης χρωμάτων 1 ή 2.

7 ΕΙΕ πρότυπα αντίληψης χρωμάτων 1, 2 ή 3.

<sup>2</sup> Ένας βαθμός τουλάχιστον 0,7 στον έναν οφθαλμό, συνιστάται για να μειωθεί ο κίνδυνος μη εντοπισμένης υποκείμενης πάθησης

<sup>3</sup> Ότιως ορίζεται στις International Recommendations for Colour Vision Requirements for Transport από την Commission Internationale de l'Eclairage (CIE-143-2001συμπερ λαμβανομένων τυχόν μεταγενέστερων εκδόσεων).

#### TMHMA A-I/10

Αναγνώριση πιστοποιητικών

- 1 Οι διατάξεις του κανονισμού I/10, παράγραφος 4 που αφορούν την μη αναγνώριση πιστοποιητικών που εκδόθηκαν από μη Κράτος μέλος δεν θα θεωρείται όπ εμποδίζουν ένα Μέρος, όταν εκδίδει δικά του πιστοποιητικά, να αποδέχεται θαλάσσια υπηρεσία, εκπαίδευση και άσκηση που αποκτήθηκε υπό την δικαιοδοσία μη Μέλρυς, με την προϋπόθεση ότι το Μέρος συμμορφώνεται με τον κανονισμό I/2 κατά την έκδοση κάθε τέταιου πιστοποιητικού και εξασφαλίζει ότι ικανοποιούνται οι απαιτήσεις της Σύμβασης που αναφέρονται σε θαλάσσια υπηρεσία, εκπαίδευση, άσκηση και ικανότητα.
- 2 Εάν μία Διοίκηση που έχει αναγνωρίσει πιστοποιητικό, αποσύρει την θεώρηση αναγνώρισης για πεθαρχικούς λόγους, θα πρέπει να ενημερώσει το Μέρος που εξέδωσε το πιστοποιητικό όσον αφορά τις συνθήκες απόσυρσης της θεώρησης.

#### TMHMA A-1/11

Ανανέωση ισχύος πιστοποιητικών

# Επαγγελματική ικανότητα

- 1 Συνεχιζόμενη επαγγελματική εκανότητα όπως απαιτείται σύμφωνα με τον κανονισμό I/11, θα θεμελιώνεται ως εξής:
  - .1 να υπάρχει εγκεκριμένη θαλάσσια υπηρεσία εκτελώντας λειτουργίες που αρμόζουν προς το κατεχόμενο πιστοποιητικό για χρονικό διάστημα τουλάχιστον:
    - 1.1 δώδεκα μηνών συνολικά κατά την διάρκεια των προηγούμενων πέντε ετών, ή
    - 1.2 τριών μηνών συνολικά κατά την διάρκεια των προηγούμενων έξι μηνών αμέσως πρίν από την ανανέωση, ή
  - .2 να έχουν πραγματοπαηθεί λειτουργίες που θεωρούνται ισοδύναμες προς τη θαλάσσια υπηρεσία που απαιτείται στην παράγραφο 1.1, ή
  - .3 να έχει επιτύχει σε εγκεκριμμένη εξεταστική δοκιμασία, ή
  - .4 να έχει ολοκληρώσει με επιτυχία εγκεκριμμένο κύκλο ή κύκλους σπουδών, ή
  - .5 να έχει ολοκληρώσει εγκεκριμένη θαλάσσια υπηρεσία εκτελώντας λειτουργίες που αρμόζουν προς το κατεχόμενο πιστοπαιητικό για χρονικό διάστημα όχι μικρότερο των τριών μηνών με την ιδιότητα του υπεράριθμου, ή σε κατώτερο βαθμό αξιωματικού από αυτόν για τον οποίο ισχύει το κατεχόμενο πιστοπαιητικό, αμέσως πριν αναλάβει στον βαθμό για τον οποίο ισχύει το πιστοπαιητικό.
- 2 Οι κύκλοι σπουδών ανανέωσης και εκσυγχρανισμού γνώσεων που απαιτούνται από τον κανονισμό 1/11 θα είναι εγκεκριμμέναι και θα περιλαμβάνουν όλες τις αλλαγές στους σχετικούς εθνικούς και διεθνείς κανονισμούς που αφορούν την ασφάλεια της ζωής στη θάλασσα και την προστασία του θαλάσσιου περιβάλλοντος και θα λαμβάνεται υπόψη οποιαδήποτε τροποποίηση του αντιστοίχου προτύπου ικανότητας.
- 3 Συνεχιζόμενη επαγγελματική ικανότητα για δεξαμενόπλαια, όπως απαιτείται σύμφωνα με τον κανονισμό Ι/11, θα θεμελιώνεται ως εξής:
  - .1 να υπάρχει εγκεκριμένη θαλάσσια υπηρεσία, εκτελώντας καθήκοντα που αρμόζουν προς το κατεχόμενο πιστοποιητικό για δεξαμενόπλοια ή την θεώρηση του, για χρονικό διάστημα τουλάχιστον τριών μηνών συνολικά κατά την διάρκεια των προηγούμενων πέντε ετών, ή
  - .2 να έχει ολοκληρώσει με επιτυχία εγκεκριμμένο σχετικό κύκλο ή κύκλους σπουδών.

#### MEPOΣ A - 1/12

Πρότυπα που διέπουν την χρήση προσομοιωτών

#### ΜΕΡΟΣ 1 - ΠΡΟΤΥΠΑ ΛΕΙΤΟΥΡΓΙΑΣ

Γενικά πρότυπα λειτουργίας προσομοιωτών που χρησιμοποιούνται στην εκπαίδευση.

- 1 Κάθε Μέρος θα εξασφαλίζει ότι όπαιος προσομαιωτής χρησιμοπαιηθεί για υποχρεωτική εκπαίδευση που βασίζεται σε αυτόν:
  - .1 θα είναι κατάλληλος για τους συγκεκριμένους αντικειμενικούς σκοπούς και τους αντικειμενικούς σκοπούς της εκπαίδευσης,
  - .2 θα είναι κατάλληλος για προσομοίωση των επιχειρησιακών δυνατοτήτων του σχετικού εξοπλισμού που βρίσκεται στο πλοίο, σε επίπεδο φυσικού ρεαλισμού που είναι απαραίτητος στους αντικειμενικούς σκοπούς εκπαίδευσης περιλαμβανομένων των τικανοτήτων, περιορισμών και πιθανών σφαλμάτων τέταου εξοπλισμού,
  - .3 θα εξασφαλίζεται επαρκής ρεαλιστική συμπεριφορά που θα επιτρέπει στον εκπαιδευόμενο να αποκτήσει τις δεξιότητες που είναι κατάλληλες για τους αντικειμενικούς σκοπούς της εκπαίδευσης,
  - .4 θα παρέχει ελεγχόμενο επιχειρησιακό περιβάλλον ικανό να δημιουργήσει παικίλία καταστάσεων α οποίες μπορεί να περιλαμβάνουν ανάγκη, επικίνδυνες ή ασυνήθιστες συνθήκες που είναι σχετικές με τους αντικειμενικούς σκοπούς της εκπαίδευσης,
  - .5 θα παρέχει διατάξεις προσαρμογής μέσω των οποίων ο εκπαιδευόμενος μπορεί να έλθει σε επαφή με τον εξοιτλισμό, το εξομοιούμενο περιβάλλον και, όπου απαιτείται, με τον εκπαιδευτή, και .6 θα επιτρέπει στον εκπαιδευτή να παρακολουθεί, ελέγχει και καταγράφει τις ασκήσεις για τον αποτελεσματικό σχολιασμό των ενεργειών των εκπαιδευομένων.

# Γενικά πρότυπα απόδοσης των προσομοιωτών που χρησιμοποιούνται για αξιολόγηση της ικανότητας

- 2 Κάθε Μέρος θα εξασφαλίσει ότι οπαιοσδήποτε προσομαιωτής που χρησιμοπαιείται για την αξιολόγηση της εκανότητας που απαιτείται σύμφωνα με την Σύμβαση ή για την οπαιαδήποτε επίδειξη συνεχιζόμενης επάρκειας:
  - .1 θα είναι σε θέση να ικανοπα εί τους προσδιορισμένους αντικειμενικούς σκοπούς αφολόγησης,
  - .2 θα είναι σε θέση να προσομαιώσει τις επιχειρησιακές ικανότητες του αντιστοίχου εξοπλισμού του πλοίου σε επίπεδο φυσικού ρεαλισμού που ικανοπαιεί τους αντικειμενικούς σκοπούς της αξιολόγησης, και θα περιλαμβάνει τις ικανότητες, περιορισμούς και πιθανά σφάλματα αυτού του είδους εξοπλισμού,
  - .3 θα διαθέτει επαρκή ρεαλισμό ως προς την συμπεριφορά που θα επιτρέπει σε κάθε υποψήφιο να επιτρέξει τις απαιτούμενες δεξιότητες για τους αντικειμενικούς σκοπούς αξιολόγησης,
  - .4 θα παρέχει διατάξεις προσαρμογής μέσω των οποίων ο υποψήφιος μπορεί να ελέγξει τον εξοπλισμό και το προσομοιούμενο περιβάλλον,
  - .5 θα παρέχει ελεγχόμενο επιχειρησιακό περιβάλλον που θα είναι σε θέση να παράγει παικλία συνθηκών στις οποίες μπορεί να περιλαμβάνονται καταστάσεις ανάγκης και επικίνδυνες ή ασυνήθιστες καταστάσεις που είναι σχετικές με την αξιολόγηση των αντικειμενικών σκοπών, και
  - .6 θα επιτρέπει στον αξιολογούνται να ελέγχει και καταγράφει τις ασκήσεις για αποτελεσματική αξιολόγηση της απόδοσης του υποψηφίου.

#### Πρόσθετα πρότυπα λειτουργίας

3 Πέραν της ικανοποίησης των βασικών απαιτήσεων που καθορίζονται στις παραγράφους 1 και 2, ο εξοπλισμός προσομοίωσης στον οποίο εφαρμόζεται το παρόν τμήμα θα ανταποκρίνεται στα πρότυπα λειτουργίας που δίνονται παρακάτω ανάλογα με τον συγκεκριμμένο τύπο.

#### Προσομοίωση ραντάρ

4 Ο εξοπλισμός προσομοίωσης ραντάρ θα είναι σε θέση να προσομαώσει τις επιχειρησιακές ικανότητες του εξοπλισμού ναυτλιακού ραντάρ που ικανοπαιεί όλα τα ισχύοντα πρότυπα λειτουργίας που έγιναν αποδεκτά από τον Οργανισμό' και θα παρέχει ευκολίες για :

Βλέπε σχεπκά/ κατάλληλα πρότυπα λατουργίας που έγιναν αποδεκτά από τον Οργανισμό.

- .1 λειτουργία στον τρόπο σταθεροποιημένης σχετικής κίνησης και στους τρόπους σταθεροποιημένης αληθούς κίνησης ως προς την θάλασσα και την ξηρά,
- .2 πρότυπα μετεωρολογικών συνθηκών, παλιρροϊκά ρεύματα, θαλάσσια ρεύματα, τυφλοί τομείς, εσφαλμένες ανακλάσεις και άλλα φαινόμενα μετάδοσης και δημιουργία ακτογραμμών, σημαντήρων ναυσπλοΐας και αναμεταδοτών ραντάρ για έρευνα και διάσωση, και
- .3 δημιουργία επιχειρησιακού περιβάλλοντος πραγματικού χρόνου που περιλαμβάνει τουλάχιστον δύο σταθμούς ιδίου πλοίου με ικανότητα αλλαγής πορείας και ταχύτητας ιδίου πλοίου και περιλαμβάνει παραμέτρους 20 τουλάχιστον πλοίων στόχων και τις ανάλογες ευκολίες επικονωνιών.

Προσομοίωση αυτομάτων συστημάτων υποτύπωσης (ARPA)

- 5 Ο εξοπλισμός προσομοίωσης ARPA θα είναι σε θέση να προσομαιώσει τις επιχειρησιακές ικανότητες των ARPA που ικανοποιούν όλες τις ισχύουσες απαιτήσεις λειτουργίας που έχουν υιοθετηθεί από τον Οργανισμό και θα περιλαμβάνει ευκολίες για:
  - .1 τη χειροκίνητη και αυτόματη παρακολούθηση στόχου,
  - .2 πληροφορίες προηγούμενης πορείας,
  - .3 χρήση εξαιρουμένων περιοχών,
  - .4 οθόνη διανυσματικής/ γραφικής κλίμακας χρόνου και σταιχείων, και
  - .5 δοκιμαστικούς ελλιγμούς.

#### ΜΕΡΟΣ 2 - ΑΛΛΕΣ ΔΙΑΤΑΞΕΙΣ

# Αντικειμενικοί σκοποί εκπαίδευσης σε προσομοιωτή

6 Κάθε Μέρος θα εξασφαλίσει ότι οι στόχοι και οι αντικειμενικοί σκοποί της εκπαίδευσης που βασίζεται σε προσομοιωτές προσδιορίζονται εντός του γενικού προγράμματος εκπαίδευσης και ότι συγκεκριμμένοι αντικειμενικοί σκοποί εκπαίδευσης και εργασίες επιλέγονται ούτως ώστε να σχετίζονται στο μεγαλύτερο δυνατό βαθμό με εργασίες και πρακτικές που εφαρμόζονται στο πλοίο.

#### Διαδικασίες εκπαίδευσης

- 7 Κατά την πραγματοποίηση υποχρεωτικής εκπαίδευσης που βασίζεται σε προσομαωτές α εκπαιδευτές θα εξασφαλίζουν ότι:
  - .1 α εκπαιδευόμεναι είναι επαρκώς ενημερωμένα εκ των προτέρων όσον αφορά τους αντικειμενικούς ακοπούς και εργασίες της άσκησης και τους δίνεται επαρκής χρόνος σχεδιασμού προτού αρχίσει η άσκηση,
  - .2 οι εκπαιδευόμενοι έχουν επαρκή χρόνο εξοικείωσης με τον προσομοιωτή και με τον εξοπλισμό του προτού αρχίσει άσκηση εκπαίδευσης ή αξιολόγησης,
  - .3 οι οδηγίες που δίνονται και τα ερεθίσματα ασκήσεων προσφέρονται ως προς τους επιλεχθέντες αντικειμενικούς σκοπούς και εργασίες και στο επίπεδο εμπειρίας του εκπαιδευόμενου,
  - .4 οι · ασκήσεις παρακολουθούνται αποτελεσματικά, υποστηρίζονται ανάλογα με ακουστική και οπτική παρατήρηση των δραστηριστήτων του εκπαιδευόμενου και αναφέρεται η πριν και μετά την άσκηση του εκπαιδευόμενου αξιολόγηση,
  - .5 γίνεται στους εκπαιδευόμενους αποτελεσματικός σχολιασμός μετά το πέρας της άσκησης για να εξασφαλισθεί ότι α αντικειμενικοί σκοποί της εκπαίδευσης έχουν επιτευχθεί και ότι α επιχειρησιακές δεξότητες που έχουν επιδειχθεί αναφέρονται σε αποδεκτό πρότυπο,
  - .6 προάγεται η ισότιμη αξιολόγηση κατά την διάρκεια του σχολιασμού των εκπαιδευομένων μετά το πέρρας της άσκησης, και

.7 οι ασκήσεις προσομοιωτή έχουν εκπονηθεί και δοκιμασθεί έτσι ώστε να εξασφαλίζεται η καταλληλότητά τους για τους συγκεκριμένους σκοπούς της εκπαίδευσης.

# Διαδικασίες αξιολόγησης

- 8 Όπου οι προσομοιωτές χρησιμοποιούνται για να αξιολογηθεί η ικανότητα των υποψηφίων στο να επιδείξουν επίπεδα ικανότητας, οι αξιολογούντες θα εξασφαλίσουν όπ:
  - .1 τα κριτήρια απόδοσης προσδιορίζονται ρητά και με σαφήνεια και είναι σε ισχύ και στην διάθεση των υποψηφίων,
  - .2 τα κριτήρια αξιολόγησης θεσπίζονται σαφώς και εξασφαλίζουν ρητά τήν αξιοπιστία και το ομοιόμορφο της αξιολόγησης και βελπιστοπαιείται η αντικειμενική μέτρηση και εκτίμηση έτσι ώστε οι υποκειμενικές κρίσεις να περιορίζονται στο ελάχιστο,
  - .3 α υποψήφια ενημερώνονται σαφώς για τις εργασίες και/ή τις δεβότητες που πρόκειται να αξιολογηθούν και για τις εργασίες και τα κριτήρια απόδοσης με τα οποία θα προσδιορισθεί η επάρκειά τους.
  - .4 η αξιολόγηση της απόδοσης λαμβάνει υπόψη τις συνηθισμένες επιχειρησιακές διαδικασίες και οπαιαδήποτε επίδραση άλλων υποψηφίων στον προσομαιωτή ή προσωπικού του προσομαιωτή στην συμπεριφορά του υποψηφίου,
  - .5 μέθοδοι μέτρησης της απόδοσης ή βαθμολόγησης για να αξιολογηθεί η απόδοση χρησιμοποιούντα με προσοχή μέχρι την πλήρη τεκμηρίωσή τους, και
  - .6 το βασικό κριτήριο αφολόγησης είναι η ικανότητα του υποψηφίου να αποδείξει ότι είναι σε θέση να εκτελέσει μία εργασία με ασφάλεια και αποτελεσματικά ικανοποιώντας τον εξεταστή.

# Προσόντα εκπαιδευτών και εξεταστών\*

9 Κάθε Μέρος θα εξασφαλίσει ότι οι εκπαιδευτές και οι αξιολογούντες έχουν τα κατάλληλα προσόντα και έχουν εμπειρία για τους συγκεκριμένους τύπους και επίπεδα εκπαίδευσης και για την αντίστοιχη αξιολόγηση ικανότητας, όπως καθορίζεται στον κανονισμό Ι/6 και στο τμήμα Α-Ι/6.

# **TMHMA A - I/13**

Πραγματοποίηση δοκμών

(δεν υπάρχουν διατάξεις)

#### **TMHMA A-1/14**

Ευθύνες εταιριών

- 1 Εταιρείες, πλοίαρχει και μέλη πληρώματος-έχουν ευθύνη-για να εξασφαλισθεί ότι οι υποχρεώσεις που θεσπίζονται σε αυτό το τμήμα εφαρμόζονται πλήρως και ορθά και ότι λαμβάνονται και όποια άλλα μέτρα, όπου είναι απαραίτητο, για να εξασφαλιστεί ότι κάθε μέλος του πληρώματος έχει την δυνατότητα να συμβάλλει με τις γνώσεις του στην ασφαλή λειτουργία του πλοίου.
- 2 Η εταιρεία θα παρέχει έγγραφες οδηγίες στον πλοίαρχο κάθε πλοίου στο οποίο εφαρμόζεται η Σύμβαση καθορίζοντας τις αρχές και διαδικασίες που πρέπει να τηρούνται για να εξασφαλισθεί ότι σε όλους τους ναυτικούς που έχουν προσληφθεί πρόσφατα στο πλοίο δίνεται σε λογικά όρια η δυνατότητα να εξαικωθούν με τον εξοπλισμό του πλοίου, τις διαδικασίες λειτουργίας και άλλες ρυθμίσες που απαιτούνται για την σωστή εκτέλεση των καθηκόντων τους πριν τους γίνει ανάθεση αυτών των καθηκόντων. Τέταιες αρχές και διαδικασίες θα περιλαμβάνουν:
  - .1 τον καθορισμό λογικού χρονικού διαστήματος κατά τη διάρκεια του οποίου κάθε νεοπροσληφθείς ναυτικός θα έχει την ευκαιρία να εξαικειωθεί με:
    - .1.1 τον συγκεκριμένο εξοπλισμό, που ο ναυτικός θα χρησιμοποιεί ή χειρίζεται,

<sup>\*</sup> Οι σχεπικές πρότυπες σειρές εκπαίδευσης ΙΜΟ και της Απόφασηε MSC.64(67), Προτάσεις για τα νέα και υιοθετημένα πρότυπα Αετουργίας, μπορεί να βοηθούν στην προεταιμασία των εκπαιδευτικών προγραμμάτων

- .1.2 τις συγκεκριμένες διαδικασίες στο πλοίο όσον αφορά την φυλακή, ασφάλεια, προστασία του περιβάλλοντος και διατάξεις και διαδικασίες ανάγκης που ο ναυτικός πρέπει να γνωρίζει για να εκτελεί σωστά τα καθήκοντα που του έχουν ανατεθεί, και
- .2 τον καθορισμό καταλλήλου μέλους του πληρώματος ο οποίος θα είναι υπεύθυνος για να εξασφαλισθεί όπι δίνεται η ευκαιρία σε νεοπροσληφθένται ναυτικό να λάβει ουσιώδεις πληροφορίες στην γλώσσα που ο ναυτικός κατανοεί.
- 3 Εταιρείες θα εξασφαλίζουν ότι πλοίαρχα, αξιωματικοί και το υπόλα πο προσωπικό που τους έχουν ανατεθεί συγκεκριμένα καθήκοντα και ευθύνες στα επιβατηγά τους πλοία ro-ro, θα έχουν ολοκληρώσε εκπαίδευση εξακείωσης για την απόκτηση κατάλληλων εκανοτήτων για την ειδικότητα που έχουν προσληφθεί και τα καθήκοντα και τις ευθύνες που έχουν αναλάβει, λαμβάνοντας υπόψη τις οδηγίες που δίνονται στο τμήμα Β-1/14 αυτού του Κώδικα.

ΤΜΗΜΑ Α - I/15 Μεταβατικές διατάξεις

(δεν υπάρχουν διατάξεις ).

#### ΚΕΦΑΛΑΙΟ ΙΙ

# Πρότυπα όσον αφορά τον πλοίαρχο και το τμήμα καταστρώματος

#### TMHMA A-II/1

Υποχρεωτικές ελάχιστες απαιτήσεις πιστοποίησης αξιωματικών που είναι υπεύθυνοι φυλακής ναυσιπλοΐας σε πλοία 500 ο.χ. και άνω.

#### Πρότυπα ικανότητας

- 1 Κάθε υποψήφιος για πιστοποίηση:
  - .1 θα απαιτείται να επιδείξει την ικανότητα να αναλάβει σε επιχειρησιακό επίπεδο, τις εργασίες, καθήκοντα και ευθύνες που παρατίθενται στην στήλη 1 του πίνακα Α-ΙΙ/1,
  - .2 θα κατέχει τουλάχιστον κατάλληλο πιστοποιητικό εκτέλεσης ραδιοεπικοινωνών VHF σύμφωνα με τις απαιτήσεις των Κανονισμών Ραδιοεπικοινωνών, και
  - .3 αν ορισθεί να έχει την κύρια ευθύνη ραδιοεπικανωνιών κατά την διάρκεια περιστατικών επείγοντος, θα διαθέτει κατάλληλο πιστοποιητικό που εκδόθηκε ή αναγνωρίστηκεσύμφωνα με τις διατάξεις των Καγονισμών Ραδιοεπικοινωνιών.
- 2 Η ελάχιστη γνώση, κατανόηση και επάρκεια που απαιτείται για πιστοποίηση παρατίθενται στην στήλη 2 του πίνακα Α-ΙΙ/1.
- 3 Το επίπεδο γνώσης των θεμάτων που παρατίθεται στην στήλη 2 του πίνακα Α-ΙΙ/1 θα είναι επαρκής για τους αξιωματικούς φυλακής για να εκτελούν τα καθήκοντα τους τήρησης φυλακής\*.
- 4 Η εκπαίδευση και εμπειρία για να επιτευχθεί το απαραίτητο επίπεδο θεωρηπκών γνώσεων, κατανόησης και επάρκειας θα βασίζονται στο τμήμα Α-VIII/2, μέρος 4-1- Αρχές που πρέπει να τηρούνται κατά την τήρηση φυλακής ναυσιπλοΐας και θα λαμβάνουν υπόψη τις σχετικές απαιτήσεις αυτού του μέρους και τις οδηγίες που δίνονται στο μέρος Β του Κώδικα.
- 5 Κάθε υποψήφιος για πιστοποίηση απαιτείται να προσκομίσει αποδεικτικά στοιχεία ότι έχει επιτύχει το απαιτούμενο επίπεδο ικανότητας σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που παρατίθενται στις στήλες 3 και 4 του πίνακα Α-ΙΙ/1.

#### Εκπαίδευση σε πλοίο

- 6 Κάθε υποψήφιος για πιστοποίηση ως αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας σε πλοία 500 ο.χ. και άνω του οποίου η θαλάσσια υπηρεσία, σύμφωνα με την παράγραφο 2.2 του κανονισμού ΙΙ/1, αποτελεί τμήμα του προγράμματος εκπαίδευσης που εγκρίθηκε ως ανταπακρινόμενο στις απαιτήσεις αυτού του τμήματος θα ακολουθήσει ένα εγκεκριμένο πρόγραμμα εκπαίδευσης σε πλοίο το οποίο:
  - .1 εξασφαλίζει ότι κατά την διάρκεια της απαιτούμενης θαλάσσιας υπηρεσίας ο υποψήφιος λαμβάνει συστηματική πρακτική εκπαίδευση και εμπειρία στις εργασίες, καθήκοντα και ευθύνες αξιωματικού υπεύθυνου τήρησης φυλακής ναυσιπλοΐας, λαμβάνοντας υπόψη τις οδηγίες που δίνονται στο τμήμα Β-ΙΙ/1 αυτού του Κώδικα,
  - .2 επιτηρείται στενά και παρακολουθείται από προσοντούχους αξιωματικούς στα πλοία όπου πραγματοπαείται η εγκεκριμμένη θαλάσσια υπηρεσία, και
  - .3 είναι επαρκώς συμπληρωμένο το βιβλίο εγγραφών εκπαίδευσης ή παρόμοιο έγγραφο.

#### Παράκτιοι πλόες

7 Τα παρακάτω θέματα μπορεί να παραληφθούν από εκείνα που αναφέρονται στην στήλη 2 του πίνακα Α-ΙΙ/1 για την έκδοση περιορισμένων πιστοπαιητικών για υπηρεσία σε πλοία που εκτελούν παράκτιους πλόες, έχοντας υπ΄ όψη την ασφάλεια (safety) όλων των πλοίων που μπορεί να δραστηριοποιούνται σ' αυτά τα ύδατα:

.1 αστρονομική ναυσιπλοΐα, και

lpha σχεπκές πρότυπες σα ρές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταμασία των εκπαιδεύσεων

.2 τα ηλεκτρονικά συστήματα υπολογισ περιοχή για την οποία πρόκειται νατσχύ	μού στίγματος και ναυς ύσει το πιστοποιητικό.	πτλοΐας που δεν καλύπτο	ουν την θαλάσσια
		·	

# Πίνακας Α -ΙΙ/1

# Καθορισμός των ελάχιστων προτύπων ικανότητας για τους αξιωματικούς τήρησης φυλακής γέφυρας σε πλοία 500 ο.χ. και άνω

Λειτουργία: Ναυσιτιλοΐα σε επιχειρησιακό επίπεδο

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και επάρκει α	Μέθοδα επίδα ξης ι κανότητας	Κριτήρια αξιολόγησης τηςι- κανότητας
Σχεᾶ ασμός και εκτέλεση πορείας και προσᾶ ορ σμός θέσης	Αστρονομική ναυσιπλοΐα .  Ικανότητα να χρησι μοπαεί ουράνια αώματα για προσά οριαμό της θέσης του πλοίου.  Χερασία και παράκτια ναυσιπλοΐα  Ικανότητα προσά οριαμού της θέσης του πλοίου με χρήση:  1 σημείων ξηράς  2 βοηθημάτων ναυσιπλοΐας, περιλαμβανομένων των φάρων, φανών και σημαντήρων  3 του στίγματος αναμετρήσεως, λαμβάνοντας υπόψη τους ανέμους, τις παλίρρα ες, τα ρεύματα και την εκτιμώμενη ταχύτητα	Εξέταση κα αξιολόγηση των στα χείων που λαμβάνονται από ένα ή περι ασότερα από το ακόλουθα:  1 εγκεκριμένη εμπειρία υπηρεσίας  2 εγκεκριμένη εμπειρία εκπαίδευση σε προσομα ωτή, όπου απα τείτα  4 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου Χρήση καταλόγων χαρτών, χαρτών, ναυπικών εκδόσεων, εκπομπών ναυπλιακών προαγγελών, εξάντα, αζιμούθου κατόπτρου, συσκευές ηλεκτρονικής ναυπλίας, ηχοβολισπικές συσκευές, πυξίδα	Ο πληροφορίες που αποκτώντα από ναυπκούς χάρτες κα εκδόσες είνα σχεπκές, ερμηνεύοντα σωστά κα εφαρμόζοντα σωστά. Όλα α πιθανοί ναυπλακοί κίνδυνα αναγνωρίζοντα με ακρίβεια Η κύρα μέθοδος υπολογισμού θέσης του πλοίου είναι η πιο κατάλληλη στις επικρατούσες περιστάσεις κα συνθήκε Η θέση προσδιορίζεται εντός των ορίωπου αποδεκτού μέσου/ συστήματος λαθών Η αξισπιστία των πληροφοριών που αποκτώνται με τον κύριο τρόπο υπολογισμού στίγματος ελέγχεται σε τακτά χρονικά διαστήματα Οι υπολογισμοί και α μετρήσεις των ναυπλιακώντληροφοριών είναι ακριβείς Οι επιλεγμέναι χάρτες με τη μεγαλύτερ κλίμακαι είναι κατάλληλαι για την περιοχή της ναυσπλοΐας και αι χάρτες και αι εκδόσεις είναι σωστές σύμφωναι με τις τελευταίες διαθέσιμες πληροφορίες.
	Εμπεριστατωμένη γνώση κα ικανότητα χρήσης ναυπκών χαρτών και εκδόσεων όπως ναυπλιακές οδηγίες πίνακες παλιρραιών, οδηγίες προς ναυπλομένους, αναγγελίες προεδοποίησης ναυπκών κινδύνων, πληροφορίες πορείας πλοίου Ηλεκτρονικά συστήματα		Έλεγχα επιδόσεων και δοκιμές των ναυαπλακών συστάσεις του κατασκευαστή και την ορθή πρακτική ναυαπλοΐας
	υπολογισμού στίγματος και ναυσιπλοΐας  Ικανότητα προσά ορι σμού θέαης του πλοίου με τη χρήση ηλε-κτρονικών βοηθημάτων ναυσιπλοΐας		

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδαξης ι κανότητας	Κριτήρια αξιολόγησης της ι κανότητας
Σχεδιασμός και εκτέλεση πορείας και καθορισμός θέσης (συνέχεια)	Ηχοβολιστικές συσκευές  Ικανότητα χα μαμού του εξοπλισμού και ορθής εφαρμογής των πληροφοριών  Γιυξίδα-μαγνητική και γυροσκοπική		
	μαγνηπκών κα γυροσκοπικών πυξίδων  Ικανότητα προσά ορισμού σφαλμάτων των μαγνηπικών κω γυροσκοπικών πυξίδων,με χρήση ουράνων μέσων κα σημείων στεριάς,και περιθώριο τέτα ων σφαλμάτων  Σύστημα ελέγχου πηδαλιουχίας		απαια ατύ μοδεία και μις φομιεραες ποσαφούζοντα και εφαθηόζονται ληδοακοτικην μηξίχην
	Γνώση χα α σμού συστημάτων ελέγχου πηδαλιουχίας, διαδικοιών λα τουργίας κα μετάβασης από χα ροκίνητο σε αυτόματο έλεγχο και αντίστροφα. Προσαρμογή των ελέγχων για βέλτι στη απόδοση.		Η επιλογή του τρόπου πηδαλουχίας είνα η πλέον κατάλληλη για τις επικρατούσες συνθήκες κα ρού, της θάλασσας και της κυκλοφορίας και τους επιθυμητούς ελιγμούς
	Μετεωρολογία  Ικανότητα χρήσης κὰ κατανόησης των πληροφοριών που λαμβάνονται από τα μετεωρολογικά όργανα του πλοίου.		Μετρήσεις και παρατηρήσεις των και ακών συνθηκών είναι ακριβείς κα κατάλληλες για τον πλου
	Γνώση των χαρακτηριστικών των διαφόρων συστημάτων καιρού; των διαδικασιών αναφοράς και των συστημάτων καταγραφής.		Οι μετεωρολογικές πληροφορίες αναλύονται και ερμηνεύονται σωατά
	διαθέσιμων μετεωρολογικών πληροφοριών		1,-1

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδαξης ι κανότητας	Κριτήρια αξιολόγησης της ι- κανότητας
Τήρηση ασφαλούς φυλακής ναυσιπλοΐας	Τήρηση φυλακής  Πλήρης γνώση του περιεχομένου, της εφαρμογής κα του σκοπού του Διεθνούς Κανοκισμού Αποφυγής Συγκρούσεων στη Θάλασσα, 1972, όπως τροποποίηθηκε  Εμπεριστατωμένη γνώση των βασικών Αρχών που πρέπα να τηρούντα κατά την τήρηση φυλακής ναυσπλοΐας  Τήρηση πορείας, σύμφωνα με τη Γενικές Απατήσας Τήρησης Πορείας Πλοίων  Χρήση πληροφοριών από τον εξοπλισμό ναυσπλοΐας για την διαφύλαξη ασφαλούς τήρησης φυλακής ναυσπλοΐας  Γνώση τεχνικών τυφλής πλοήγησης Χρήση αναφοράς, σύμφωνα με της Γενικές Διατάξας για τα Συστήματα Αναφορών του Πλοίου κα τις διαδικασίες VTS	Εξέταση και αξιολόγηση των στα χείων που λαμβάνονται από ένα ή περισσότερα από τα παρακάτω:  .1 εγκεκα μένη εμπαιρία κατά την υπηρεσία .2 εγκεκα μένη εμπαιδίου απαιδευσης επί πλοίου .3 εγκεκα μένη εκπαίδευση απαιτείτα .4 εγκεκα μένη εκπαίδευση εξοπλιαμού εργαστηρίου	Η εκτέλεση, παράδοση κα παραλαβή της φυλακής γίνεται με βάση τις αποδεκτές αρχές και διαδικασίες Κατάλληλη φυλακή οπτήρα τηρείται συνεχώς και με τέται ο τρόπο ώστε να είναι σύμφωνη με τις αποδεκτές αρχές και διαδικασίες Τα φώτα, τα σχήματα και τα ηχητικά σήματα συμμορφώνονται με τις απαιήσες που περιλαμβάνονται στους διεθνείς Κανονισμούς για την Αποφυγή Συγκρούσεων στη Θάλασσα, 1972, όπως τροποπαήθηκε, και αναγνωρίζονται ορθώς Η συχνότητα και η έκταση ελέγχου της κίνησης, του πλοίου και του περιβάλλοντος είναι σύμφωνη με τις αποδεκτές αρχές και πρακτικές Τηρείται κατάλληλα ημερολόγιο των εντήσεων και των ενεργείων που σχετίζονται με την ναυσιπλοΐας του πλοίου Έχει προσδιοριστεί σε κάθε περίπτωση η ευθύνη για την ασφάλεια ναυσιπλοΐας, περιλαμβανομένων των περιόδων που ο πλοίαρχος είναι στη γέφυρα και όταν επιβαίνει πλοηγός.
	Διαχείριση πόρων γέφυρας  Γνώση των αρχών ἄαχείρισης πόρων γέφυρας, συμπερ λαμβανομένων:  .1 της κατανομής, εκχώρησης κα ιεράρχησης των πόρων  .2 της αποτελεσματικής επικανωνίας— .  .3 του δυναμισμού και της ηγεσίας  .4 της απόκτησης και δατήρησης επίγνωσης της κατάστασης  .5 της εκτίμησης ομαδικής	Αξιολόγηση των στα χείων που αποκτώνται από ένα ή περισσότερα από τα παρακάτω:  .1 εγκεκριμένη εκπαίδευση  .2 εγκεκριμένη εμπειρία κατά την υπηρεσία  .3 εγκεκριμένη εκπαίδευση σε προσομα ωτή	Οι πόρα κατανέμοντα κα εκχωρούντα, όπως απατείτα, με σωστι προτερα ότητα για την εκτέλεση απαραίτητων εργασιών Η επικανωνία δίνεται και λαμβάνεται με σαφή και αδιαμφισβήτητο τρόπο Αμφισβητήσι μες αποφάσεις και/ ή ενέργεις έχουν ως αποτέλεσμα την κατάλληλη πρόκληση και ανταπόκριση Αναγνωρίζονται αποτελεσματικές ηγετικές συμπεριφορές Μέλος(η) της ομάδας μαιράζονται ακριβή κατανόηση της υφιστάμενης και της αναμενόμενης κατάστασης σκάφους, τη διαδρομή πλοήγησης και το εξωτερικό περιβάλλον

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκα α	Μέθοδα επίδαξης ι κανότητας	Κριτήρια αξιολόγησης της ι- κανότητας
Χρήση του ραντάρ κα του ΑΚΡΑ για την τήρηση ασφαλούς ναυα πλοΐας  Σημείωση: Εκπαίδευση κα αξιολόγηση στην χρήση του ΑΚΡΑ δεν απα τείτα για όσους υπηρετούν αποκλειστικά σε πλοία που δεν είναι εφοδιασμένα με ΑΚΡΑ. Αυτός ο περιόρ σμος θα αντικατοπτρίζεται στην θεώρηση που εκδίδεται για τον ενδιαφερόμενο ναυτικό	Γνώση των θεμελιωδών αρχών του ραντάρ και των βοηθημάτων αυτομάτου υποτύπωσης (ARPA) Ικανότητα λειτουργίας, ερμηνείας και ανάλυσης πλήροφορίων λαμβάνονται από το ραντάρ, περιλαμβανομένων των ακόλουθων:  Απόδοση που περιλαμβάνοι:  1 παράγοντες που επηρεάζουν την απόδοση και την ακρίβεια  2 προεταιμασία και συντήρηση ενδεικών  3 ανίχνευση κακής απακόνησης πληροφοριών, ψευδοήχων, θαλασσίων επιστροφών κ.λ.π., ανακλαστήρων (racons) και αναμεταδότες ραντάρ (SARTs)  Χρήση περιλαμβανομένων των:  1 απόσταση και δόπτευση, πορεία και ταχύτηται άλλων πλοίων, χρόνος και απόσταση πλησιέστερου σημείου προσέγγισης, συνάντηση με διερχόμεναι πλοία.  2 αναγνώρισης κρίσιμων ήχων, ανίχνευση αλλαγών πορείας και ταχύτητας άλλων πλοίων, αποτελέσμαται αλλαγής πορείας, ταχύτητας ή και των δύο του ίδιου πλοίου  3 εφαρμογή του Διεθνούς Κανονισμού περί Αποφυγής Συγκρούσεων στη Θάλασσα, 1972, όπως έχει τροποπιαιηθεί .4 τεχνικές αποτύπωσης και αρχές σχειικής και αληθούς κίνησης	Αξιολόγηση των στα χείων που λαμβάνονται από εγκεκριένη εκπαίδευση σε προσομαιώτη ραντάρ και ΑRPA εππροσθέτως της εμπαιρίας κατά την υπηρεσία	Οι πληροφορίες που λαμβάνοντα από ραντάρ και ΑΡΡΑ γίνονται ανπληπτές και αναλύονται ορθά, λαμβάνοντας υπόψη τους περιορισμούς των συσκευών και τις επικρατούσες καταστάσεις και συνθήκες  Ενέργειες προς αποφυγή στενής επαφής ή σύγκρουσης με άλλα πλοία σύμφωνα με τον Δεθνή Κανονισμό περί Αποφυγής Συγκρούσεων στη Θάλασσα, 1972, όπως τροποπα ήθηκε.  Αποφάσεις για αλλαγή πορείας και/ή ταχύτητας είναι έγκαι ρες και σύμφωνες με τις αποδεκτές ναυα πλοίλές πρακτικές  Ρυθμίσεις που γίνονται στην πορεία και την ταχύτητα του πλοίου για διατήρηση της ασφάλειας της ναυα πλοίλας  Πραγματοποίηση επικαινωνιών με καθαρό, σαφή και επιβεβαιούμενο τρόπο σε κάθει περίπτωση, με τρόπο που προαιδιάζει σε ναυτικό περιβάλλον  Σήμαται κινήσεων πραγματοπαιούνται στον κατάλληλο χρόνο και είναι σύμφωνα με τον Δεθνή Κανονισμό περί Αποφυγής Συγκρούσεων στη Θάλασσα, 1972, όπως τροποπαιήθηκε

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκεια	Μέθοδα επίδα ξης ι κανότητας	Κατήρα αξιολόγησης της ικανότητας
Χρήση ραντάρ κα ΑRPA για τήρηση ασφαλούς Ναυαπλοΐας (συνέχαα) Σημείωση: Εκπαίδευση κα αξιολόγηση στη χρήση του ΑRPA δεν απα τείτα για όσους υπηρετούν αποκλειστικά σε τπλοία που δεν είναι εφοδιασμένα με ARPA. Αυτός ο περιόμισμος θα φαίνεται στην θεώρηση που εκδίδεται για τον ενδιαφερόμενο ναυτικό	Βασκοί τύπα ΑΡΡΑ, χαρακτηριστικά της οθόνης τους, χαρακτηριστικά απόδοσης και κίνδυνα από υπερβολική εμπιστοσύνη στο ΑΡΡΑ  Ικανότητα λα τουργίας και κατανόησης και ανάλυσης των πληροφοριών που λαμβάνονται από το ΑΡΡΑ, περιλαμβανομένων των:  .1 απόδοση και ακρίβαια του συστήματος, δυνστότητες παρακολούθησης και περιοριστίς και καθυστερήσας επεξεργασίας  .2 χρήση λα τουργικών προειδοπαήσεων και δοκιμών του συστήματος  .3 μέθοδαι ανάληψης στόχου και αι περιορισγοί τους  .4 σχετικά και αληθή διανύσματα, γραφική απαικόνιση πληροφορίων του στόχου και επικύνδινες περιοχές  .5 κτήση και ανάλυση πληροφορίων πληροφοριών, κρίσιμες ηχοί, περιοχές αποκλαισμού και δοκιμαστικές κινήσεις		
Χρήση ECDIS για τήρηση ασφαλούς Ναυσ πλοΐας  Σημείωση: Εκποίδευση κα αξιολόγηση στη χρήση ΕCDIS δεν απα τείτα για όσους υπηρετούν αποκλειστικά σε πλοία του δεν είνα εφοδιασμένα με ECDIS.  Αυτοί α περιορισμοί θα φαίνοντα στις θεωρήσεις του εκδίνοντα για τον ενδιαφερόμενο ναυτικό	Ναυσιπλοΐα με χρήση ECDIS  Γνώση της ικανότητας και των περιορισμών, των λα τουργίων της ECDIS, συμπεριλαμβανομένων:  1 εμπεριστατωμένη γνώση των δεδομένων του Ηλεκτρονικού Χάρτη Ναυσιπλοΐας (ENC), την ακρίβαια των δεδομένων, τους κανόνες παρουσίασης, πις επιλογές εμφάνισης και άλλες μορφές δεδομένων χαρτών  2 κίνδυνα από υπερβολική εμπιστοσύνη  3 εξαικείωση με πις λαιτουργίες του ECDIS, που απαιτούνται από τα πρότυπα επιδόσεων που ισχύουν	Εξέταση κα αξολόγηση των στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  .1εγκεκριμένη εμπαρία εκπαίδευσης επι πλοίου .2 εγκεκριμένη εκπαίδευση σε προσομα ωτή ECDIS	Οθόνες πληροφοριών σχετικά με ECDIS κατά τρόπο που συμβάλλα στην ασφαλή πλοήγηση Πληροφορίες που λαμβάνοντα από ECDIS (συμπεριλαμβανομένων των ραντάρ κα/ή ραντάρ παρακολούθησης λατουργιών, όπου είνα εφοδιασμένα) γίνοντα αντιληπτές και αναλύονται ορθά, λαμβάνοντας υπόψη τους περιορισμούς των συσκευών, όλους τους αυνδεδεμένους αι σθητήρες (συμπεριλαμβανομένων των ραντάρκα AIS, όπου είναι διασυνδεδεμένολα τις επικρατούσες καταστάσεις και συνθήκες

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδε ξης εκανότητας	Κα τήα α αξιολόγησης της ι κανότητας
Χρήση ECDIS για τήρηση ασφαλούς Ναυαπλοΐας (συνέχεια) Σημείωση:: Εκπαίδευση και αξιολόγηση στη χρήση ΕCDIS δεν απατείται για όσους υπηρετούν αποκλαιστικά σε πλοία που δεν είναι εφοδιασμένα με ECDIS. Αυτοί αι περιορισμοί θα φαίνονται στις θεωρήσεις που εκδίνονται για τον ενδιαφερόμενο ναυτικό	Επάρκαα στη λατουργία, την ερμηνεία και ανάλυση των πληροφοριών που λαμβάνονται από ΕCDIS, περιλαμβανομένων των:  1 χρήση των λατουργιών που ενσωματώνονται με άλλαι συσήματα πλοήγησης σε διάφορες εγκαταστάσας, συμπεριλαμβανομένης της ομαλής λατουργίας και της προσαρμογής στις επθυμητές ρυθμίσας  2 ασφαλή παρακολούθηση και προσαρμογή των πληροφοριών, περιλαμβανομένων της θέσης του, της ακόνας της θαλάσσιας περιοχής, του τρόπου και του πρασανατολισμού, των δεδομένων χαρτών που εμφανίζονται, της παρακολούθησης της πορείας, των στρωμάτων πληροφοριών που δημιουργούνται από το χρήστη, των επαφών (όπου είναι διασυνδεδεμένο)  3 επιβεβαίωση της θέσης του πλοίου με εναλλακτικά μέσα  4 επαρκής χρήση των ρυθμίσεων για να εξασφαλίσουν τη συμμόρφωση με τις επιχειρησιακές διαδικασίες, περιλαμβανομένων των παραμέτρων συναγερμού για αποφυγή προσάραξης, της εγγύτητας σε επαφές και αδικές περιλαμβανομένων των των χαρτών και της κατάστασης ενημέρωσής τους, και των βοηθητικών ρυθμίσεων και αφών ώστε ναι ανταποκρίνονται στις παρούσες συνθήκες  6 επίγνωση της κατάστασης κατά τη χρήση του ΕCDIS, συμπεριλαμβανομένων της ασφάλειας των υδάτων, της εκτροπής εκ της πορείας του πλοίου εξαιτίας της κλίσης του ρεύματος, των δεδομένων των χαρτών και της εκτροπής εκ της πορείας του πλοίου εξαιτίας της κλίσης του ρεύματος, των δεδομένων των χαρτών και της εκτροπής εκ της πορείας των πλοίου εξαιτίας της κλίσης του ρεύματος, των δεδομένων των χαρτών και της εκτροπής εκ της πορείας των πλοίου εξαιτίας της κλίσης του ρεύματος, των δεδομένων των χαρτών και της εκτροπής εκ της πορείας των πλοίου εξαιτίας της κλίσης του ρεύματος, των δεδομένων των χαρτών και της εκτροπής εκ της πορείας της κλίσης του ρεύματος, των δεδομένων των χαρτών και της επιλογής κπικαινωνίσες και της διαχείρσης, και της ακεραίτητας των αιθητήρων		Η ασφάλεια της ναυσιπλοΐας διαπρείται μέσω προσαρμογών που πραγματοπα ήθηκαν για την πορεία και την ταχύτητα του πλοίου μέσω ελεγχόμενων λειτουργών διατήρησης πορείας ECDIS (όπου είναι εφοδιασμένο) Πραγματοποίηση επικανωνών με καθαρό, σαφή και επιβεβαιούμενο τρόπο σε κάθε περίπτωση, με τρόπο που προσιδιάζει σε ναυτικό περιβάλλον

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και επάρκεια	Μέθοδα επίδε ξης ικανότητας	Κριτήρια αξιολόγησης της ικανότητας
Ανταπόκριση σε έκτακτες ανάγκες	Διαδικασίες έκτακτης ανάγκης Προφυλάξας για την προστασία και την ασφάλεια των επιβατών σε καταστάσεις έκτακτης ανάγκης Αρχικές ενέργειες που πρέπει να γίνονται μέτα από σύγκρουση ή προσάραξη, αρχική εκπίμηση και έλεγχος ζημών Εκπίμηση των διαδικασιών που πρέπει να ακολουθούνται για δάσωση προσώπων στη θάλασσα, πλοίου σε κίνδυνο, ανταπόκριση σε καταστάσεις ανάγκης που εγείρονται στο λιμάνι.	Εξέταση και αξιολόγηση των στα χείων που λαμβάνονται από ένα ή περισσότερα από τα σκόλουθα:  1 εγκεκριμένη εμπειρία κατά την υπηρεσία 2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου 3 εγκεκριμένη εκπαίδευση σε προσομαιωτή, όπου απαιτείτα 4 πρακτική εκπαίδευση	Το είδος και η έκταση της έκτακτης ανάγκης προσά ορί- ζονται άμεσα Οι αρχικές ενέργειες και, εν- δεχομένως, αι ελιγμοί του πλοίου, είναι σύμφωναι με τα σχέδαι έκτακτης ανάγκης και είναι κατάλληλαι για τον επεί- γονται χαρακτήρα της κατά- στασης και τη φύση της κατά- στασης έκτακτης ανάγκης
Ανταπόκριση σε σήματα κνδύνου στην θάλασσα	Έρευνα και διάσωση Γνώση των περιεχομένων του Εγχαιριδίου της Διεθνούς Αεροναυτικής και Ναυτικής Έρευνας και Διάσωσης (IAMSAR)	Εξέταση και αξιολόγηση που προκύπτουν από πρακτικές οδηγίες ή εγκεκα μένη εκπαίδευση σε προσομαιωτή, όπου απαιτείτα	Σήματα κνδύνου ή επείγοντος αναγνωρίζονται άμεσα.  Σχέἄα έκτακτης ανάγκης και οδηγίες σε πάγες εντολές εκτελούνται με ακρίβα α
Χρήση Τυποπα ημένων Ναυ- πκών Φράσεων Επικοκανω- νίας του ΙΜΟ και χρήση των Αγγλικών.σε γραπτή και προφορική μορφή	Αγγλική γλώσσα Επαρκής γνώση της Αγγλικής γλώσσας, ώστε να επτρέπε στον αξωματικό να χρησιμοπα εί χάρτες κα άλλες ναυτικές εκδόσες, να κατανοεί μετεωρολογικές πληροφορίες και μηνύματα που αφορούν την ασφάλεια και τη λειτουργία του πλοίου, την επικα νωνία με άλλα πλοία και παράκπους σταθμούς και κέντρα VTS, καθώς επίσης και την εκτέλεση των καθηκάντων του αξιωματικού σε πολυεθνικά πληρώματα, περιλαμβανομένης της ικανότητας χρήσης και κατανότησης Τυποπαιημένων Ναυτικών Φράσεων Επικοκανωνίας του iMO (iMO SMCP)	Εξέταση και αφολόγηση των στα χείων που προκύπτουν από πρακπκές οδηγίες	Ορθή αναγνώμση ή καταγραφή ναυτικών εκδόσεων κα μηνυμάτων στην Αγγλική γλώσσα που έχουν σχέση με την ασφάλεια του πλοίου  Οι επικανωνίες είναι σαφείς και κατανοητές

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4	

Ικανότητα	Γνώση, κατανόη-	Μέθοδα επίδε-	Κριτήρια αξιολό-
. <del></del>	ση κα επάρκεα	ξηςι κανότητας	γησης τηςι κανό- τητας
Εκπομπή και λήψη πληροφορών με οππκά σήματα	Οππκά σήματα Ικανότητα χρήσης του Διε- θνούς Κώδικα Σημάτων Ικανότητα εκπομπής και λή-	Αξιολόγηση των σταχείων που προκύπτουν από πρα- κπκές αδηγίες κα/ ή προσο- μοίωση	Συνεχής επιτυχής επικανωνία ατην περιοχή ευθύνης του χειριστή
	ψης σημάτων κινδύνου SOS με τον οππικό τηλέγραφο Μόρς, όπως ορίζονται στο Παράρτημα ΙV του Διεθνούς Κανοικομού Αποφυγής Συγκρούσεων στη Θάλασσα, 1972, όπως τροποποίηθηκε, και στο προσάρτημα 1 του Διεθνούς Κώδικα Σημάτων, και οππικών σημάτων από σήματα μεμονωμένων γραμμάτων, όπως επίσης, ορίζονται στο Διεθνή Κώδικα Σημάτων		
Διαχεία ση κινήσεων του πλοίου	Χυρισμοί πλοίου  Γνώση:  .1 την επίδραση του νεκρού φορτίου, του βυθίσματος, της κλίσης, της ταχύτητας και του βάθους κάτω από την τρόπτοα στις αποστάσας κατά τους ελιγμούς και την ακινητοπαίηση του πλοίου  .2 της επίδρασης του ανέμου και του ρεύματος στην διαχείραση του πλοίου  .3 των κινήσεων και διαδικασιών για τη διάσωση ατόμου στη θάλασσα  .4 των ρηχών υδάτων και παρόμα ων φαινομένων	Εξέταση και αξιολόγηση των σταχείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη επί πλοίου εκπαίδευση .3 εγκεκριμένη εκπαίδευση σε προσομαιωτή, όπου απαιτείτα  .4 εγκεκριμένη εκπαίδευση σε επανδρωμένο μοντέλο (ομοίωμα) πλοίου, όπου απαιτείτα	Μη υπέρβαση σε κανές κινήσες των ασφαλών λετουργικών ορίων της πρόωσης του πλοίου και του συστήματος πηδαλιουχίας Διατήρηση της ασφάλειας της ναυα πλοΐας κατά την εκτέλεση ρυθμίσεων πορείας και ταχύτητας του πλοίου
	.5 των κατάλληλων διαδικα- σιών αγκυροβολίας και πρόσ- δεσης		

Λα τουργία: Δι αχείρηση φορτίου και στα βασία σε επιχαρησιακό επίπεδο

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ι κανότητας	Κρ τήρια αξιολόγησης της ι κανότητας
Γιαρακολούθηση της φόρτωσης, στα βασίας, ασφάλσης κα φροντίδας των φορτίων κατά τον πλου κα την εκφόρτωση τους	Διαχείριση φορτίου, στοιβασοία και ασφάλιση  Γνώση της επίδρασης του φόρπου περιλαμβανομένων και φορτωτήρων βαρέων αγπκειμένων στην αξιοπλοΐα και την ευστάθεια του πλοίου  Γνώση ασφαλούς διαχείρησης, σταβασίας και ασφάλισης φορπων, περιλαμβανομένων επισφαλών, επικύνδινων και επιπτώσες τους στην ασφάλεια της ζωής και του πλοίου  Ικανότητα επίτευξης και διαπήρησης αποτελεσματικής επικανωνίας κατά την διάρκεια φόρτωσης και εκφόρτωσης	Εξέταση κα αξιολόγηση των στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  1 εγκεκα μένη εμπαρία κατά την υπηρεσία  .2 εγκεκα μένη εμπαρία εκπαίδευσης επί πλοίου  .3 εγκεκα μένη εκπαίδευση σε προσομαωτή, όπου απα τείτα	Ο εργασίες φορπου α εξάγοντα σύμφωνα με το σχέαο φορπου ή άλλα έγγραφα κα τους θεσπισμένους κανόνες! κανοικαμούς ασφαλείας, οδηγίες χαιριαμού εξοπλισμού και τους επί του πλοίου περιορισμούς στα βασίας  Ο χαιριαμός επικίνδυνων κα επιβλαβών φορτίων συμμορφώνεται με τους α εθνείς κανοισμούς και τα αναγνωρισμένα πρότυπα και τους κώδικες ασφαλούς πρακτικής Οι επικαινωνίες αίναι σαφείς, κατανοιτές και συνεχώς επιτυχείς
Επιθεώρηση και αναφορά ατελειών και ζημιών στους χώρους του φορτίου, τα καπάκια και τις δεξαμενές έρματος	Γνώση* και ικανότητα να επεξηγεί πού πρέπει να ανα-ζητηθούν ζημίες και τα ατέλεις που συναντώνται συχνά λόγω:  .1 των λα τουργιών φόρτωσης και εκφόρτωσης  .2 ἄάβρωσης  .3 αντίξοων και ρικών συνθηκών Ικανότητα ναι δηλώνει τα μέρη του πλοίου που πρέπει ναι επιθεωρούνται κάθε φορά, προκειμένου να καλυφθούν όλα ται μέρη μέσαι αε συγκεκριμένοι χρονικό άσστημα  Προσδορίζει αυτά ται σταιχεία της κατασκευής του πλοίου, ται οποία είναι καίρας σημασίας για την ασφάσ	Εξέταση κα αξιολόγηση των αποδεκτικών σταχείων που λαμβάνονται από ένα ή περασότερα από τα ακόλουθα:  1 εγκεκριμένη εμπαρία κατά την υπηρεσία  2 εγκεκριμένη εκπαίδευση επί του πλοίου  3 εγκεκριμένη εκπαίδευση προσομαιωτή, όπου απαιτείται	Ο επιθεωρήσες εκτελούνται σύμφωνα με καθορισμένες διαδικασίες, και α ατέλες και α ζημές εντοπίζονται και αναφέρονται κανονικά Οπου δεν εντοπίζοναπι ατέλες ή ζημές, τα στα χεία που προκύπτουν από πς δοκμές και την εξέταση υπο δεκνύουν σαφώς την επαρκικανότητα στην πιστή εφαρμογή των διαδικασιών και των κανονικών και των ελαστωμαπικών ή κατεστραμμένο μερών του πλοίου

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4	

<sup>.</sup> Πρέττα να είναι κατανοητό ότι οι αφωματικοί καταιστρώματος δεν απαιτείται να διαθέτουν το προσόντα για την επιθεώρηση των πλοίων

Ικανότητα	Γνώση, κατανόηση και επάρκεια	Μέθοδα επίδαξης ι κανότητας	Κα τήα α αξ ολόγησης της ι κανότητας
Επθεώρηση και αναφορά ατελειών και ζημιών στους χώρους του φορτίου, τα καπάκα και τις δεξαμενές έρματος (συνέχεια)	Να προσά ορίζει τις αιτίες της αιάβρωσης ατους χώρους του φορτίου και των δεξαμενών έρματος και πώς η αιάβρωση μπορεί να εντοπίζεται και να παρεμποδίζεται Γνώση των αιαδικασιών αεξαγωγής των επιθεωρήσεων Ικανότητα επεξήγησης πώς θα αιασφαλίζεται αιξόπιστος εντοπισμός των ατελειών και των ζημιών		
•	Κατανόηση του σκοπού του "προχωρημένου προγράμ- ματος επιθεωρήσεων"		

# Λα τουργίες: Έλεγχος της λα τουργίας του πλοίου και μέρι μνα για τα άτομα επί του πλοίου σε λα τουργικό επίπεδο

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και επάρκεια	Μέθοδα επίδα ξης ι κανότητας	Κα τήα α αξ ολόγησης της ικανότητας
Εξασφάλιση συμμόρφωσης με απατήσεις πρόληψης ρύπανσης	Πρόληψη ρύπανσης του θαλασσίου περιβάλλοντος και ανπρυπαντικές διαδικασίες Ενώση των προληπτικών μέτρων που πρέπει να λαμβάνονται για την πρόληψη της ρύπανσης του θαλάσσιου περβάλλοντος  Αντιρρυπαντικές διαδικασίες και όλος ο σχετικός εξοπλσμός  Σημασία των προληπτικών μέτρων για την προστασία του θαλάσσιου περβάλλοντος	Εξέταση κα αξιολόγηση των στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  1 εγκεκριμένη εμπειρία κατά την υπηρεσία  2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  3 εγκεκριμένη εκπαίδευση	Δαϊ κασίες παρακολούθησης λειτουργιών επί του πλοίου και εξασφάλιση πλήρους συμμόρφωσης με τις απαιτή- σες της ΜΑΚΡΟL Ενέργεες για να εξασφαλίζε- ται η διατήρηση πεαβαλλο- ντικού προτύπου
Διατήρηση αξιοπλοΐας του πλοίου	Ευστάθεια πλοίου  Εργασιακή γνώση και εφαρμογή ευστάθειας, και πινάκων τάσεων και διαγωγής, διαγραμμάτων και εξοπλαμού υπολογισμού τάσεων  Κατανόηση των βασικών δράσεων που πρέπει να λαμβάνονται σε περίπτωση	Εξέταση και αξιολόγηση των στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1εγκεκριμένη εμπαιρία κατά την υπηρεσία  .2 εγκεκριμένη εμπαιρία εκπαίδευσης επί πλοίου	Οι συνθήκες ευστάθειας συμμορφούνται με τα κατήρια ακέρα ης ευστάθειας του ΙΜΟ κάτω από όλες τις συνθήκες φόρτωσης Ενέργεις που εξασφαλίζουν και διατρούν τη υδατοστεγή ακεραιότητα του πλοίου σύμφωνα με αποδεκτή πρακτική.

	μερικής απώλειας της ακέρα ης πλευστότητας. Κατανόηση των βασικών αρχών υδατοστεγούς ακερα ότητας Κατασκευή πλοίου Γενική γνώση των κύριων κατασκευαστικών μερών πλοίου και των σωστών ονομάτων των διαφόρων μερών	.3 εγκεκρυένη εκπαίδευση προσομαωτή, όπου απα- τείτα .4 εγκεκρυένη εκπαίδευση  εξοπλισμού εργαστηρίου	
Πρόληψη, έλεγχος και κατα- πολέμηση πυρκαγιών στο πλοίο	Πρόληψη πυρκαγιών και συσκευές πυρόσβεσης Ικανότητα οργάνωσης γυμνασίων πυρκαγιάς Γνώση κλάσεων και χημείας της πυρκαγιάς Γνώση των συστημάτων πυρόσβεσης	Αξιολόγηση των στα χείων που λαμβάνονται από εγκεκα μένη εκπαίδευση και εμπαιρόσβεσης όπως καθορίζονται στο τμήμα Α-VI/3	Ο τύπος κα η κλίμακα του προβλήματος προσά ορίζο- ντα άμεσα κα α αρχικές δράσες συμμορφώνοντα με τη διαδικασία έκτακτης ανάγκης κα τα σχέδα έκτακτης ανάγκης για το πλοίο  Ο διαδικασίες εγκατάλει ψης, διοκοπής λειτουργίας έκτακτης ανάγκης και απομόνωσης είναι κατάλληλες για την φύση της έκτακτης ανάγκης και εφαρμόζονται άμεσα.

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και επάρκεια	Μέθοδα επίδε ξης ι κανότητας	Κα τήα α αξ ολόγησης της ι κανότητας
Πρόληψη, έλεγχος και κατα- πολέμηση πυρκαγιών στο πλοίο <i>(συνέχεια)</i>	Γνώση των δράσεων που πρέπε να λαμβάνοντα σε περίπτωση πυρκαγιάς περιλαμβανομένων των πυρκαγιών των συστημάτων πετρελαίου	_	Ο βαθμός προτερα ότητας και τα επίπεδα και χρονικά όρια σύνταξης αναφορών και πληροφόρησης προσωπικού επίπου πλοίου είναι σχετικά με την φύση της έκτακτης ανάγκης και αντικατοπτρίζουν το επείγον του προβλήματος.
-Λειτουργία συσκευών διά- σωσης	Ικανότητα οργάνωσης γυ- μνασίων εγκατάλει ψης πλοί- ου κα γνώση της λετουργίας  συσκευών δάσωσης κα  λέμβων δάσωσης, των  αυσκευών κα ρυθμίσεων  καθέλκυσής τους κα του  εξοπλισμού τους, περιλαμ- βανομένων των συσκευών  δάσωσης ραδοεπικα νωνί- ας, δορυφορικών ΕΡΙΚΒε,  SARTs, στολών εμβάππισης  και θερμικών προστατευπ-	Αξιαλόγηση σταχείων που λαμβάνοντα από εγκεκαμένη εκπαίδευση κα εμπαρία όπως καθορίζοντα στο τμήμα Α-VI/2, παράγραφα 1 έως 4.	Οι ενέργειες ανταπόκρισης σε καταστάσεις εγκατάλειψης πλοίου και επιβίωσης είναι κατάλληλες για τις επικραστάσεις και συμμορφώνονται με αποδεκτά πρότυπα και πρακτικές ασφαλείας (safety)
Εφαρμογήτατρικών πρώτων βοηθαών επί του πλοίου	Ιατρική Βοήθαα Πρακτική εφαρμογή των ιατρικών οδηγιών και συστάσεων που λαμβάνονται με ραά οεττικα νωνία περιλαμβάνομένης της ικανότητας λήψης αποτελεσματικών	Αφολόγηση των αποδεκτικών στα χείων που λαμβάνοντα από εγκεκμ μένη εκπαίδευση που καθορίζετα στο τμήμα Α-VI/4, παράγραφα 1 έως	Ο προσά ορ σμός πιθανού αίπου, φύσης κα έκτασης τραυμοπισμών ή συνθηκών είναι γρήγορη και η ανπμετώπιση ελαχιστοπα εί την άμεση απαλή για τη ζωή

	ενεργειών που βασίζοντα σε αυτή τη γνώση σε περίπτω- ση ατυχημάτων ή ασθενειών που είναι πιθανόν να συμ- βούν στο πλοίο		
Παρακολούθηση συμμόρ- φωσης με τις νομοθετικές απα τήσεις	Βασική εργασιακή γνώση των σχετικών Συμβάσεων ΙΜΟ που αφορούν στην ασφάλεια (safety) της ζωής στη θάλασσα, στην προστασία του θαλάσσιου περιβάλλοντος	Αξιολόγηση των στα χείων που λαμβάνοντα από εξέταση ή εγκεκριμένη εκπαίδευση	Νομοθεπκές απα τήσεις που σχετίζονται με την ασφάλεια (safety) της ζωής στη θάλασσα, την ασφάλεια (security) και την προστια- σία του θαλασσίου περι- βάλλοντος αναγνωρίζονται σωστά

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και επάρκεια	Μέθοδα επίδα ξης ι κανότητας	Κρι τήρι α αξιολό- γησης της ι κανό- τητας
Εφαρμογή εκανοτήτων ηγεσίας και ομαδικής εργασίας	Εργασιακή γνώση διαχείρσης και εκπαίδευσης προσωπικού επί πλοίου Γνώση των σχεπικών διεθνών ναθικών συμβάσεων και της εθνικής νομοθεσίας Ικανότητα εφαρμογής διαχείρισης καθηκόντων και φόρτου εργασίας περιλαμβανομένων:  1 σχεδιασμός και συντοναμός 2 ανάθεση καθηκόντων προσωπικού 3 περιορισμοί χρόνου και πόρων 4 καθορισμός προτεραι οτήτων	Αξιολόγηση στα χείων που λαμβάνονται από ένα ή πε- ρισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εκπαίδευση .2 εγκεκριμένη εμπαιρία κατά την υπηρεσία .3 πρακτική επίδειξη	Το πλήρωμα έχα κατανεμημένα καθήκοντα κα είνα ενημερωμένο για τα αναμενόμενα πρότυπα εργασίας και συμπεριφοράς κατά τρόπο κατάλληλο για τα ενδιαφερόμενα άτομα  Οι εκπαιδευπκοί στόχαι και δραστηριότητες βασίζονται στην αξιολόγηση της τρέχουσας ι κανότητας και των δυνατοτήτων και τις λατουργικές απαιτήσας  Οι λα τουργίες δακνύονται σύμφωνες με τους ισχύοντες κανόνες
	Γνώση και κανότητα εφαρμογής αποτελεσματικής άαχεια σης πόρων:  .1 κατανομή, ανάθεση και καθορισμός προτερα στήτων των πόρων  .2 αποτελεσματική επικανωνία στο πλοίο και στην		ντα και α πόρα δατίθε- ντα όπως απατείται με ορθή προτερα ότητα για την εκτέλεση των απα- ραίτητων καθηκόντων Η επικανωνία δίνεται και λαμβάνεται με σσφή και σδιαμφισβήτητο τρόπο
	χωνία στο πλοίο και στην ξηρά .3 α αποφάσεις αντάνα- κλούν την εξέταση εμπε- ρών της ομάδας		Δεκνύοντα αποτελεσμα- τικές συμπεριφορές ήγε- σίας

.4 δυναμομός και ηγεσία περλαμβανομένης της παροχής κινήτρου .5 απόκτηση και διατήρηση επίγνωσης της κατάστασης	Ακρβής κατανόηση από τα απαραίτητα μέλη της ομάδας της υφιστάμενης και προβλεπόμενης και τόστασης και της λαιτουργικής κατάστασης του πλοίου και του εξωτερικού περιβάλλοντος
Γνώση και ικανότητα εφαρ- μογής τεχνικών λήψης απο- φάσεων:	Οι αποφάσεις είναι α αποτελεσματικότερες για
.1 αξολόγηση κατάστασης και κνδύνου .2 προσάορισμός και εξέ-	
ταση επιλογών που προκύ- πτουν	
.3 επιλογή σχεδίου δράσης .4 αξιολόγηση απατελε- σματικότητας έκβασης	

Στήλη 1 Ικανότητα	Στήλη 2 Γνώση, κατανόη- ση και επάρκει α	Στήλη 3 Μέθοδα επίδα ξηςικα- νότητας	Στήλη 4 Κα τήα α αξ ολόγη- σης της ικανότητας
Συμβολή στην ασφάλεια (safety) του προσωπικού και του πλοίου	Γνώση τεχνικών προσωτικής επιβίωσης Γνώση πρόληψης πυρκαγιάς και ικανότητα καταπολέμησης και πυρόσβεσης Γνώση στα χειωδών πρώτων βοηθειών Γνώση προσωπικής ασφόλειας και καινωνικών ευθυνών	Αξιολόγηση στα χείων που λαμβάνονται από εγκεκριμένη εκπαίδευση και εμπαιρία όπως καθορίζεται στο τμήμα Α-VI/1, παράγραφος 2	Ο κατάλληλος προσιατευπκός εξοπλισμός και α εξοπλισμός και α εξοπλισμός και α εξομοπαιούνται σωστά  Ο διαδικασίες και ασφαλείς εργασιακές πρακτικές που έχουν σχεδιασθεί για την προστασία του προσωπικού και του πλοίου τηρούνται ανά πάσα στιγμή  Ο διαδικασίες που έχουν σχεδιασθεί για την προστασία του περιβάλλοντος τηρούνται ανά πάσα στιγμή  Ο αρχικές και ακόλουθες ενέργθες για την απόκτηση επίγνωσης κατάστασης έκτακτης ανάγκης συμμορφώνονται με τις θεσπισμένες διαδικασίες αντιμετώπισης έκτακτης ανάγκης.

#### Τμήμα Α - ΙΙ/2

Υποχρεωτικές ελάχιστες απαιτήσεις πιστοποίησης πλοίαρχων και υποπλοιάρχων πλοίων 500 ο.χ. ή άνω

#### Πρότυττο Ικανότητας

- 1 Κάθε υποψήφιος για πιστοποίηση ως πλοίαρχος ή υποπλοίαρχος πλοίου 500 ο.χ. ή άνω θα απαιτείται να επιδεικνύει εκανότητα να αναλάβει, σε επίπεδο διοίκησης, τις εργασίες, καθήκοντα και ευθύνες που παρατίθενται στη στήλη 1 του πίνακα Α-ΙΙ/2.
- 2 Η ελάχιστη γνώση, κατανόηση και επάρκεια που απαιτείται για πιστοποίηση παρατίθεται στην στήλη 2 του πίνακα Α-ΙΙ/2. Αυτή ενσωματώνει, διευρύνει και αναλύει σε βάθος τα θέματα στην στήλη 2 του πίνακα Α-ΙΙ/1 για αξιωματικούς που είναι υπεύθυναι φυλακής ναυσιπλοΐας.
- 3 Εχοντας υπ 'όψη όπ ο πλοίαρχος έχει την τελική ευθύνη για την ασφάλεια (safety) και την ασφάλεια (security) του πλοίου, των επιβατών του, του πληρώματος και του φορτίου, καθώς και για την προστασία του θαλάσσιου περιβάλλοντος από ρύπανση που προέρχεται από το πλοίο και όπιο υποπλοίαρχος θα πρέπει να είναι σε θέαη να αναλαμβάνει αυτή την ευθύνη οποιαδήποτε σπιγμή, η αξιολόγηση σ' αυτά τα θέματα θα είναι σχεδιασμένη κατά τρόπο ώστε να ελέγχεται η ικανότητά τους να αφομαιώνουν όλες τις διαθέσιμες πληροφορίες που επηρεάζουν την προστασία (safety) και ασφάλεια (security) του πλοίου, των επιβατών του, του πληρώματος ή του φορτίου, ή την προστασία του θαλάσσιου περιβάλλοντος.
- 4. Το επίπεδο γνώσης των θεμάτων που παρατίθενται στην στήλη 2 του πίνακα Α-Ι//2 θα είναι επαρκές για να είναι σε θέση ο υποψήφιος να υπηρετήσει υπό την ιδιότητα του πλαιάρχου ή υποπλαιάρχου.\*.
- 5 Το επίπεδο θεωρητικών γνώσεων, κατανόησης και επάρκειας που απαιτείται σύμφωνα με τα διάφορα τμήματα στη στήλη 2 του πίνακα Α-ΙΙ/2 μπορεί να πακίλει ανάλογα με το αν το πιστοποιητικό πρόκειται να ισχύει για πλοία 3.000 ο.χ. ή άνω ή για πλοία μεταξύ 500 ο.χ. και 3000 ο.χ..
- 6 Η εκπαίδευση και εμπειρία για την επίτευξη του απαραίτητου επιπέδου θεωρητικών γνώσεων, κατανόησης και επάρκειας θα λαμβάνουν υπόψη τις σχετικές απαιτήσεις αυτού του μέρους και τις οδηγίες που δίνονται στο τμήμα Β αυτού του Κώδικα.
- 7 Κάθε υποψήφιος για πιστοποίηση απαιτείται να προσκομίσει αποδεικτικά σταιχεία από τα οποία θα προκύπτει οπ έχει επιτύχει το απαιτούμενο πρότυπο ικανότητας σύμφωνα με τις μεθόδους επίδειξης ικανότητας και κριτήρια αξιολόγησης ικανότητας που παρατίθενται στις στήλες 3 και 4 του πίνακα Α-ΙΙ/2.

#### Παράκτια πλόες

8 Η Αρχή μπορεί να εκδίδει πιστοπαιητικό περιορισμένο για υπηρεσία σε πλοία που εκτελούν αποκλειστικά παράκτιους πλόες και, για την έκδοση τέταου πιστοπαιητικού, μπορεί να εξαιρούνται θέματα που δεν ισχύουν στα συναφή ύδατα ή σε ενδιαφερόμενα πλοία, έχοντας υπ 'όψη την επίπτωση στην ασφάλεια (safety) όλων των πλοίων που μπορεί να δραστηριοπαιούνται σ' αυτά τα ύδατα.

<sup>🔭 🔾</sup> σχετικές πρότυπες σειρές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταιμασία των εκπαιδεύσεων

# Πίνακας Α-ΙΙ/2

# Προσδεορισμός ελαχίστου επιπέδου ι κανότητας για πλα άρχους και υποπλα άρχους σε πλοία 500 ο.χ.ή άνω

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και επάρκεια	Μέθοδα επίδα ξηςι - κανότητας	Κα τήα α αξ ολόγησης της ικανότητας
Σχεἄασμός πλου κα εκτέ- λεση ναυσιπλοΐας.	Σχεᾶασμός πλου και ναυαι- πλοῖας υπό όλες τις συνθή- κες με αποδεκτές μεθόδους υποτύπωσης ωκεανίων ο- δών λαμβάνοντας υπόψη π.χ.:  1 περιορισμένα ύδατα  2 μετεωρολογικές συνθήκες  3 πάγους  4 περιορισμένη ορατότητα  5 σχέδια διαχωρισμού κυ- κλοφορίας  6 περιοχές υπηρεσίας Κυ- κλοφορίας Πλοίων (VTS)  7 περιοχές εκτεταμένων παλιρραιακών επιπτώσεων. Πορεία σύμφωνα με τις Γενικές Διατάξεις Πορείας Πλοίων. Σύνταξη αναφορών σύμφωνα με τις Γενικές Αρχές για Συστήματα Αναφοράς Πλοίων και με τις διαδικασίες	Εξέταση κα αφολόγηση στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπαρία κατό την υπηρεσία  .2 εγκεκριμένη εκπαίδευση σε προσμαωτή, όπου απα τείτα εξοπλισμού εργαστηρίου χρησιμοπαιώντας καταλόγους χαρτών, ναυπκών εκδόσεων κα στα χείων του πλοίου.	Ο εξοπλισμός, α χάρτες και α ναυτικές εκδόσεις που απα τού- ντα για τον πλου απαριθμούνται και είναι κατάλληλες για την α- σφαλή πραγματοποίηση του πλου.  Ο λόγα για την σχεδιασθείσα πορεία υποστηρίζονται από γε- γονότα και σταπαπικά στα χεία που λαμβάνονται από σχεπικές τηγές και εκδόσεις και υπολογισμός χρόνου είναι ορθά εντός των αποδεκτών προ- τύπων ακριβείας για εξοπλισμό ναυαιπλοΐας.  Όλα απιθανοί κίνδυναι ναυαιπλοΐας αναγνωρίζονται με ακρίβεια.
Προσά ορ σμός απίγματος κα ακρίβεια του απορρέο- ντος καθορισμού απίγματος με οπα οδήποτε μέσο	Προσά ορ σμός στίγματος υπό όλες τις συνθήκεις:  .1 με αστρονομικές παρατηρήσεις  .2 με γή νη παρατήρηση περιλαμβανομένων της ικανότητας χρήσης κατάλληλων χαρτών, οδηγών στους ναυτιλλομένους και άλλων εκδόσεων για την αξιολόγηση της ακρίβειας της τιμής στίγματος που επιτεύχθηκε  .3 χρήση σύγχρονων ηλεκτρονικών βοηθήμάτων ναυσπλοΐας, με ειδική γνώση των αρχών λειτουργίας τους, περιορισμών, πηγών σφαλμάτων, εντοπισμού λανθασμένης παρουσίασης, πληροφορών και μεθόδων αποκατάστασης για την επίτευξη ακριβούς στίγματος	Εξέταση κα αξολόγηση στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκρμένη εκπαίδευση κατά τη ά άρκεια της υπηρεσίας  .2 εγκεκρ μένη εκπαίδευση σε προσομα ωτή, όπου απα τείτα  .3 εγκεκρ μένη εκπαίδευση εξοπλισμού εργαστηρίου με χρήση:  1. χαρτών, ναυπκού ΑΙΜΑΝΑC, σελίδων υποτύπωσης, χρονόμετρου, εξάντα και υπολογιστή	Η κύρα μέθοδος που επλέγετα για τον κάθοραμό σήγματος πλοίου είνα η πιο κατάλληλη για πς καταστάσες και συνθήκες που επικρατούν. Το σήγμα που λαμβάνετα με αστρονομική παρατήρηση βρίσκετα μέσα στα αποδεκτά όρια ακρίβειας. Το σήγμα που λαμβάνεται με γήνη παρατήρηση βρίσκετα μέσα στα αποδεκτά όρια ακρίβειας. Η ακρίβεια του σήγματος αξιολογείται ορθά

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκεια	Μέθοδα επίδε ξης ι κα- νότητας	Κατήα α αξολόγησης της ικανότητας
Προσά οα σμός στίγματος κα ακρίβεια του απορρέο- ντος καθορισμού στίγματος με οπα ονδήποτε μέσο (συνέχεια)	·	2. χαρτών, ναυπκών εκδόσεων και οργάνων ναυσπλοΐας (αζμουθ κού καθρέπτη, εξάντα, ημερολογίου, ηχοβολισπκού εξοπλισμού, πυξίδας) και των εγχυρίων των κατασκευαστών 3. ραντάρ, γή νων ηλεκτρονικών συστημάτων καθοριαμού στίγματος, συστημάτων δορυφορικής ναυσπλοΐας και κατάλληλων ναυπκών χαρτών και εκδόσεων	Το στίγμα που λαμβάνετα από τη χρήση ηλεκτρονικών βοηθημάτωνναυα πλοΐας βρίσκετα εντός των προτύπων ακρίβειας των συστημάτων που χρησιμοπαιούντα. Τα πιθανά σφάλματα που έχουν επίπτωση στην ακρίβεια του απορρέοντας στίγματος μνημονεύοντα και α μέθοδα ελα χιστοποίησης των επιπτώσεων των αφαλμάτων του συστήματος στην πηή του απορρέοντος στίγματος εφαρμόζονται όπως πρέπει.
Προσά ορισμός και περιθώριο ισφαλμάτων πυξίδας.	Ικανότητα προσά ορισμού κα περθωρίου σφαλμάτων μαγνηπκής και γυροσκοπικής πυξίδας Γνώση των αρχών μαγνηπκήςκαι γυροσκοπικής πυξίδας Κατανόηση των συστημάτων που τελούν υπό τον έλεγχο της κύριας γυροσκοπικής πυξίδας και γνώση της λαιτουργίας και φροντίδας των κύριων τύπων γυροσκοπικής πυξίδας	Εξέταση κα αξιολόγηση στα χείων που λαμβάνοντα από ένα ή περισσότερα από το ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη εκπαίδευση σε προσομαιμή, όπου απαιτείτα  .3 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου  με χρήση: ουράνων παραπηρήσεων, γήνων διοπτεύσεων και σύγκρισης μεταξύ μαγνητικής και γυροσκοπικής πυξίδας	Η μέθοδος και συχνότητα ελέγχων για σφάλματα μα- γνήπκής και γυροφοριών κρίβαια των πληροφοριών
Συντονισμός επιχειρήσεων έρευνας και διάσωσης.	Εμπεριστατωμένη γνώση κα ικανότητα εφαρμογής των διαδικασιών που περιγράφοντα στο Δεθνές Εγχαρίδιο Αεροναυπικής και Θαλάσσιας Έρευνας και Διάσωσης (IAMSAR).	Εξέταση και αξιολόγηση στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη εκπαίδευση προσομα ωτή, όπου απα τείτα  .3 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου,  με χρήση: σχεπκών εκδόσεων, χαρτών, μετεωρολογικών δεδομένων, στα χείων των εμπλεκομένων πλοίων, εξοπλισμού ραδισεπικανωνιών και άλλων διαθέσμων ευκολιών και ενός ή περισσότερων από ται ακόλουθα:  .1 εγκεκριμένη εκπαιδευση προσομα ωτή, όπου απαιτείτα	Το σχέδιο συντονισμού επιχαρήσεων έρευνας και δάσωσης είναι σύμφωνο με πς δεθνείς οδηγίες και πρότυπα. Θεσπίζονται ραδιοεπικανωνίες και τηρούνται σωστές διαδικασές επικανωνιών σε όλα τα στάδια των επιχαιρήσεων έρευνας και διάσωσης

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκεια	Μέθοδα επίδα ξης ικανότητας	Κριτήρια αξιολόγησης της εκανότητας
Θέσπιση διαδικασιών κα ρυθμίσεων τήρησης φυλα- κής	Λεπτομερής γνώση του περ ε- χομένου, εφαρμογής και σκο- πού των Δεθνών Κανονισμών Πρόληψης Συγκρούσεων στην Θάλασσα, 1972, όπως έχουν τροποποιηθεί Λεπτομερής γνώση του περ ε- χομένου εφαρμογής και σκο- πού των Αρχών που πρέπα να τηρούνται κατά την τήρηση φυλακής ναυσιπλοΐας	Εξέταση και αξιολόγηση αποδεκτικών στα χείων που λαμβάνονται από ένα ή περιασότερα από τα ακόλουθα:  1 εγκεκριμένη εμπειρία κατά την υπηρεσία  2 εγκεκριμένη εκπαίδευση σε προσομαιωτή, όπου απαιείται	Ρυθμίσες και διαδικασίες τήρησης φυλακής θεσπίζονται και τηρούνται σύμφωνα με διεθνείς κανοναμούς και οδηγίες για να εξασφαλίζεται η ασφάλεια ναυσιαπλοΐας, η προστασία του θαλασσίου περιβάλλοντος και η ασφάλεια του πλοίου και των επιβαινόντων.
Διατήρηση ασφαλούς ναυα πλοΐας με χρήση πληροφορών εξοπλισμότων προς υποβοήθηση στη λήψη αποφάσεων διακυβέρνησης  Σημείωση: Εκπαίδευση και αξολόγηση στη χρήση ΑΡΡΑ δεν απαιτείται για εκείνους που υπηρετούν αποκλεισπικά σε πλοία που δεν διαθέτουν ΑRPA. Ο περιορισμός αυτός θα αντανακλάται στις θεωρήσεις που θα εκδίνονται στον ενδιαφερόμενο ναυτικό	Εκτίμηση του συστήματος σφαλμάτων κα εμπεριστατωμένη κατανόηση των λατουργικών πλευρών των συστημάτων ναυαπλοΐας  Σχεά ασμός τυφλής πλοήγησης Αξιολόγηση των πληροφοριών ναυα πλοΐας που προέρχοντα από όλες τις πηγές, περιλαμβανομένων ραντάρ κα ΑRPA, γα τη λήψη και εφαρμογή αποφάσεων διακυβέρνησης προς αποφυγή συγκρούσεων και για τη διεύθυνση της ασφαλούς ναυσιπλοΐας του πλοίου Η συσχέπιση και βέλπιστη χρήση όλων των δεδομένων γαυσιπλοΐας που είναι διαθέα μα για την πραγματοποίηση της ναυσιπλοΐας	Εξέταση και αφολόγηση αποδεικτιών στα χείων που λαμβάνονται από εγκεκριμένο προσομαιωτή ΑRPA και έναι ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπορία κατά την υπηρεσία  .2 εγκεκριμένη εκπαίδευση σε προσομαιωτή, όπου απο τείτα  .3 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου	Ο πληροφορίες που λαμβάνοντα από τον εξοπλισμό και τα συστήματα ναυα πλοΐας ερμηνεύονται και αναλύονται ορθά, λαμβάνοντας υπόψη τους περι ορισμούς του εξοπλισμού και τις επικρατούσες συνθήκες και καταστάσες.  Ο ενέργειες που λαμβάνονται για την αποφυγή προσέγγισης ή σύγκρουσης με άλλο πλοίο, είναι σύμφωνες με τους Διεθνείς Κανανισμούς Πρόληψης Συγκρούσεων στη θάλασσα, 1972, όπως έχουν τροποπαιηθεί.
Δατήρηση ασφάλειας (safely) ναυα πλοΐας με χρήση ECDIS και σχετικών συστημάτων ναυα πλοΐας προς υποβοήθηση της λήψης αποφάσεων διακυβέρνησης  Σημείωση: Εκπαίδευση και αξιολόγηση στη χρήση ΕCDIS δεν απα τείται για όσους υπηρετούν αποκλα στικά σε πλοία που δεν είναι εφοδιασμένα με ECDIS. Ο περιορισμός αυτός θα αντανακλάται στην θεώρηση που θα εκδίδεται για τον ενδιαφερόμενο ναυτικό	Διαχείριση των λειτουργκών διαδικασών, αρχείων και δε- δομένων συστήματος περιλαμ- βανομένων:  .1 διαχείρισης προμηθειών, χορήγησης αδεών και ενημέ- ρωσης δεδομένων χαρτών και συστήματος λογισμικού του συστήματος για τη συμμόρφωση με θεσπισμένες διαδικα- σίες  .2 αναβάθμισης συστήματος και πληροφοριών, περιλαμβανομένης της εκδοσης συστήματος ΕCDiS σύμφωνα με την ανά- πτυξη προϊόντος του πωλητή .3 δημιουργίας και διατήρησης διαμόρφωσης συστήματος και αντιγράφων αρχείων ασφαλείας  .4 δημιουργίας και τήρησης αρχείων ημερολογίου καιαγραφής, σύμφωνα με	Αξιολόγηση αποδεκτικών στα χείων που λαμβάνοντα από ένα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη εμπειρία εκπαίδευσης σε πλοίο  .3.εγκεκριμένη εκπαίδευση σε προσόμα ωτή ECDIS	Λειτουργικές ἄαἄ κασίες για τη χρήση ECDIS καθορίζοντα, ε-φαρμόζοντα και παρακολουθού ντα  Μέτρα που λαμβάνονται για την ελαχιατοποίηση του κινδύνου για την ασφάλεια (safety) της ναυαιπλοΐας

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα ε- πάρκε α	Μέθοδα επίδα - ξηςι κανότητας	Κα τήα α αξ ολόγησης της ι κανότητας
Διατήρηση ασφάλα ας ναυσιπλοΐας με χρήση ΕCDIS κα σχετικών συστημάτων ναυσιπλοΐας προς υποβοήθηση της λήψης αποφάσεων ἄακυβέρνησης (συνέχαα)  Σημείωση: Εκπαίδευση κα αξολόγηση στη χρήση ECDIS δεν απατείτα για όσους υπηρετούν αποκλαστικά σε πλοία του δεν είναι εφοδασμένα με ECDIS. Ο περιοραμός αυτός θα αντανακλάται στην θεώρηση που θα εκδίδεται για τον ενδαφερόμενο ναυτικό	.5 δημ ουργίας και τήρησης αρχείων αχεδιασμού πορείας σύμφωνα με καθιερωμένες διαδικασίες .6 χρήσης λειτουργιών ημερολογίου πλοίου ECDIS καθώς και καταγραφής ιστομικού πορείας για έλεγχο λειτουργιών αυστήματος,,των ρυθμίσεων του συναγερμού και των αντιδράσεων των χρηστών Χρήση λειτουργίας αναπαραγωγής ECDIS για επανεξέταση θαλασσίου πλου, σχεδιασμό διαδρομής και αναθεώρηση των λειτουργιών του συστήματος		
Πρόβλεψη και ρικών και ωκεανογραφικών συν- θηκών.	Ικανότητα κατανόησης κα ερμηνείας συνοπτικού χάρτη κα πρόγνωσης καρού περιοχής λαμβάνοντας υπόψη τις τοπικές κα ρικές συνθήκες κα πληροφορίες για τον καιρό που λαμβάνονται από το FAX καιρού  Γνώση των χαρακτηριστικών των διαφόρων καιρικών συστημάτων, περιλαμβανομένων των περιστροφικών τροπικών καταιγίδων και αποφυγής κέντρων καταιγίδων και επικίνδυνων τεταρτημορίων  Γνώση των ωκεανείων συστημάτων ρευμάτων  Ικανότητα υπολογισμού συνθηκών παλίρραιας  Χρήση όλων των κατάλληλων ναυτικών εκδόσεων για παλίρραιες και ρεύσ	Εξέταση κα αξιολόγηση στα χείων που λαμβά- νονται από ένα ή περισσότερα από τα ακόλου- θα:  1 εγκεκριμένη εκπαί- δευση στην υπηρεσία  2 εγκεκριμένη εκπαί- δευση εξοπλισμού εργαστηρίου	Ο πιθανές κα μκές συνθήκες που προβλέποντα για καθο- μαμένο χρονικό δάστημα  βασίζοντα σε όλες πις διαθέ- σιμες πληροφορίες Τα μέτρα που λαμβάνοντα γι  να διατηρείτα η ασφάλεια τη  ναυα πλοίας ελαχιστοπαιούν  οπαιοδήποτε κίνδυνο για την  ασφάλεια του πλοίου. Οι λόγα για προπθέμενες  ενέργειες υποστηρίζονται απα  σταποτικά σταχεία και παρα- τηρήσεις των πραγματικών  και μικών συνθηκών
Ανταπόκα ση σε συνθή- κες ναυα πλοΐας έκτα- κτης ανάγκης.	ματα Προληπικά μέτρα κατά την προσάραξη πλοίου σε αμμώδη Μέτρα που πρέπα να λαμβάναντα άν επίκα τα προσάραξη κα μετά από προσάραξη πλοίου που έχα προσαράξα με κα χωρίς βοήθαα Μέτρα που πρέπα να λαμβάνοντα όταν επίκατα σύγκρουση κα μετά από σύγκρουση ή ζημία της υδατοστεγούς ακερα ότητας του σκάφους από οπα οδήποτε αίπο Εκτίμηση ελέγχου ζημών Πηδαλιουχία επείγουσας ανάγκης	Εξέταση και αξιολόγηση αποδεικτικών στα χείων που λαμβάνονται από πρακτική εκπαίδευση, εμπειρία κατά την υπη- ρεσία και πρακτικά γυ- μνάα αι σε διαδικασίες έκτακτης ανάγκης	Ο τύπος και κλίμακα οπα ου- δήποτε προβλήματος αναγνω ρίζονται έγκαι ρα και αι αποφό σες και ενέργειες ελαχιστο- παούν τις επιπτώσεις οπα αις δήποτε δυσλειτουργίας των συστημάτων του πλοίου Ο επικανωνίες είναι αποτελει σματικές και συμμορφώνοντοι με τις διαδιακασίες που έχουν θεσπισθεί Ο αποφάσεις και ενέργειες μεγιστοπαιούν την ασφάλεια των επι-βαινόντων

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
<b>Ι</b> κανότητα	Γνώση, κατανόηση κα επάρκεια	Μέθοδα επίδα ξης ικανότητας	Κατήα α αξιολόγησης της ικανότητας
Ελιγμοί κα χερισμός πλοί-	Ελιγμοί κα χεραμός πλοίου σε όλες ες συνθήκες περιλαμβανουένων:  1 ελιγμών όταν προσεγγίζει πλοηγικούς σταθμούς και κατά την επιβίβαση και αποβίβαση πλοηγιών,λαμβάνοντας υπ' όψη τον καιρό, παλίρραα, κατεύθυνση πλώρης και απόσταση αλιγτοποίησης  2 χειραμών πλοίου σε ποταμούς, εκβολές ποταμών και σε περιοσμένων υδάτων στην ανταπόκρα περιομένων υδάτων στην ανταπόκρα με σταθερό ρυθμό  4 ελιγμών σε ρηχά ύδατα, περιλαμβανομένης της μείωσης του ελεύθερου βάρους κάτω από την τρόπιδα που οφείλεται σε επιβύθισης από την τρόπιδα που οφείλεται σε επιβύθισης και αναχώρησης οξερχομένων πλοίων και μεταξύ διερχομένων πλοίων και μεταξύ διερχομένων πλοίων και μεταξύ διου πλοίου και γετονικών οχθών (επίπτωση διαύλου)  6 πλεύρισης και αναχώρησης από προβλήτα με διαφορεπικές συνθήκες ανέμου, παλίρρα ας και ρευμάτων με και χωρίς συνθήκες ανέμου, παλίρρα ας και ρευμάτων με και χωρίς συνθήκες ανέμου, παλίρρα ας και ρευμάτων με και χωρίς συνθήκες ανέμου πρόψουλκού  7 αλληλεπίδρασης πλοίου και σηκυροβολίας με μία ή δύο άγκυρες σε περιοριαμένα αγκυροβολίας με μία ή δύο άγκυρες σε περιοριαμένα αιγκυροβολίας της άγκυρας που προσά ορισμό του μήκους αλυσίδας της άγκυρας που πρόκειται να χρησιμοποιηθεί .10 συρόμενης άγκυρας, απελευθέρωσης μπλεγμένων αγκυρών  11 δεξαμενισμού με ζημίες και παράγοντες του μπλευρών  11 δεξαμενισμού με ζημίες και παράγοντες του μπλευρών		Ολες α αποφάσας που αφορούν πλεύμα η κα αγκυροβολία βασίζοντα σε ορθή αξιολόγηση των ελγμών και των χαρακτηριστικών της μηχανής του πλοίου και των γίνετα πλεύμα η ή είναι αγκυροβολημένο.  Εν πλω, γίνετα πλήρης αξιολόγηση των πιθανών επιπτώσεων ρηχών και περιομομένων υδάτων, πάγου, οχθών, αυνθηκών παλίρρα ας, διερχομένων πλοίων και του πρωραίου και πρυμναίου και τρυμναίου και πρυμναίου ώστε το πλοίο να μπορεί να εκτελεί χαι μα σμούς με ασφάλα αυπόδα αφορετικές συνθήκες φορτίου και και ρού

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκεια	Μέθοδα επίδα ξης ι κανότητας	Κριτήρια αξιολόγησης της ικανότητας
Ελγμοί και χειρισμός πλοί- ου με όλες τις συνθήκες. (συνέχειαι)	.12 διαχείρισης και χειρισμού πλοίων σε δυσμενείς και ρικές συνθήκες, περιλαμβανομένης παροχής βοηθείας σε πλοίο ή αεροσκάφος σε κίνδυνο, επιχερήσεων ρυμούλκησης, μέσων να τηρηθεί ακυβέρνητο πλοίο μακρυά από το κοίλωμα του κύματος τής θάλασσας, μείωσης της έκπτωσης, χρήσης ελαίου		
	.13 προληπηκών μέτρων κατά τους ελγμούς για καθαίρεση λέμβων διάσωσης ή σκαφών επιβίωσης υπό δυσμενείς καιρκές συνθήκες		
	.14 μεθόδων επιβίβασης δια- σωθέντων από λέμβους διά- σωσης και σκάφη επιβίωσης		
	.15 ικανότητας προσά ορισμού χαρακτηριστικών ελιγμών και προώσεως καινών τύπων πλοίων, με αιδική αναφορά στις αποστάσεις αινητοποίησης και κύκλου στροφής με διάφορα βυθίσματα και τοχύτητες		
	.16 σημασίας της ναυα πλοΐας με μα ωμένη ταχύτητα προκα- μένου να αποφεύγετα ζημία του προκαλείτα από τον πρυ- μναίο ή πρωραίο κυμαπομό του ιδίου του πλοίου		
	.17 πρακτικών μέτρων που πρέπει να λαμβάνονται όταν εκτελείται ναυσιπλοΐα σε ή κοντά σε πάγους ή υπό συνθήκες συσσώρευσης πάγου στο πλοίο		
	.18 χρήσης και ελγμών σε ή πλησίον περιοχών σχεδίων ἄαχωρισμού κυκλοφορίας και υπηρεσιών κυκλοφορίας πλοίων (VTS)		
Χειρ σμός τηλε-ελέγχων της εγκατάστασης πρόωσης και μηχανολογικών συστημά- των και υπηρεαιών	Αρχές λειτουργίας εγκαταστάσεων ναυτικών μηχανών Βοηθητικές μηχανές πλοίου Γενική γνώση όρων ναυτικής μηχανολογίας	Εξέταση και αξιολόγηση αποδεικτικών στα χείων που λαμβάνονται από έναι ή περισσότερα από τα ακόλουθα:	Οι εγκαταστάσες, βοηθητικά μηχανήματα και εξο- πλισμός λει τουργούν το ύμφωνα  με τις τεχνικές προδιαγραφές  και πάντοτε εντός των ορίων  ασφαλούς λει τουργίας.
		κατά την υπηρεσία .2 εγκεκα μένη εκπαίδευ- ση σε προσομα ωτή, ό- που απα τείτα	

Λειτουργία: Χειμισμός φορτίου και στα βασία σε δια κητικό επίπεδο

Στήλη 1	Στήλη 2 Γνώση, κατανόηση κα επάρκε α	Στήλη 3 Μέθοδα επίδεξης ικανότητας	Στήλη 4 Κα τήα α αξιολόγησης της ικανότητας

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ικανότητας	Κριτήρια αξιολόγησης της ικανότητας
Αξιολόγηση αναφερόμενων ελαιτωμάτων και ζημών σε χώρους φορτίου, καλύμματα στομίων κυτών και δεξαμενές έρματος και λήψη κατάλληλων μέτρων	Γνώση των περιορισμών αντο- χής των ζωπκών κατασκευα- σπκών μερών προτύπου πλοί- ου μεταφοράς χύδην φορτίου και ικανότητα ερμηνείας στα- χείων που έχουν δοθεί για πς ροπές κάμψης και πς δυνάμες ἄάτμησης Ικανότητα εξήγησης τρόπου αποφυγής αρνηπκών συνε- πειών για πλοία μεταφοράς χύδην φορτίου, από ἄάβρωση, κόπωση και ανεπαρκή χειρισμό	Εξέταση και αφολόγηση αποδακτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπαρία κατά την υπηρεσία  .2 εγκεκριμένη εκπαίδευση σε προσομαωτή, όπου απα τείτα  με χρήση: πινάκων ευσιάθα ας διαγωγής και τάσεων, διαγραμμάτων και εξοπλισμού υπολογισμού τάσεων	Ο αξολογήσεις βασίζοντα σε αποδεκτές αρχές, βάσι μους ι-σχυμοτρούς και πραγματοπα ούντα με ορθό τρόπο. Ο αποφάσεις που λαμβάνοντα είναι αποδεκτές, λαμβάνοντας υπόψη την ασφάλεια του πλοίου και τις επικρατούσες συνθήκες
Μεταφορά επι κι νδύνων φορτίων	Διεθνείς κανονισμοί, πρότυπα, κώδικες και συστάσας για την μεταφορά επικινδύνων φορτίων περιλαμβανομένου του Διεθνούς Ναυπικού Κώδικα Επικινδύνων Πραιόντων (IMDG) και του Διεθνούς Ναυπικού Κώδικα Στερεών Φορτίων Χύδην (IMSBC Code)  Μεταφορά επικινδύνων, οχληρών και επιβλαβών φορτίων, προφυλάξας κατά την διάρκαι της φόρτωσης και μέριμνα κατά την διάρκαι του πλου	Εξέταση και αξιολόγηση στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη εκπαίδευση σε προσομα ωτή όπου απα τείτα  .3 εγκεκριμένη εξαιδικευμένη εκπαίδευση	Η προγραμματισμένη κατανομή του φορτίου βασίζεται σε αξόπατες πληροφορίες και είναι σύμφωνη με θεσπισμένες οδηγίες και νομικές απαιτήσες.  Ο πληροφορίες επί των κινδύνων, οχλήσεων και ειδικών απαιτήσεων και ειδικών απαιτήσεων καταγράφονται σε τύπο που προσφέρεται για εύκολη αναφορά σε περίπτωση που προκύπτει κάπαιο περιστατικό.

Λατουργία: Έλεγχος της λατουργίας του πλοίου και φροντίδα επιβα νόντων σε ἃ α κητικό επίπεδο

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδαξης ικανότητας	Κριτήρια αξιολόγησης της ικανότητας
Ελεγχος διαγωγής, ευ- στάθειας και τάσεων.	Κατανόηση των βασικών αρχών κατασκευής πλοίου κα των θε- ωρών κα παραγόντων που  επηρεάζουν την ἄαγωγή κα  ευστάθεια και των απαραίτητων  μέτρων για την ἄατήρηση της  ἄαγωγής και ευστάθεια πλοίου σε  περίπτωση ζημίας και της επα- κόλουθης κατάκλυσης ἄαμερί- σματος και των αντιμέτρων που  πρέπει ναλαμβάντοντα  Γνώση των συστάσεων του ΙΜΟ  που αφορούν στην ευστάθεια  πλοίου	Εξέταση και αξιολόγηση αποδεκτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη εμπειρία εκπαίδευσης σε πλοίο  .3 εγκεκριμένη εκπαίδευση σε προσομα ωτή, όπου αποίτε τα	Η ευστάθεια και α συνθήκες τάσεων παραμένουν πάντοτε εντός ασφαλών ορίων
Παρακολούθηση και έ- λεγχος συμμόρωσης με νομοθεπικές απα τήσεις και μέτρα που εξασφαλί- ζουν την ασφάλεια και προστασία της ζωής προστασία του θαλάσαι- ου περιβάλλοντος	Γνώση ἄεθνούς ναυπλακής νομοθεσίας που εμπερέχετα σε ᾶεθνείς συμφωνίες και συμβάσες Θα δίνεται προσοχή ι αιίτερα στα ακόλουθα:  1 πιστοπαηπκά και άλλα έγγραφα που απατούνται ναι φέρονται στα πλοία υπό πις αεθνείς συμβάσες, πώς λαμβάνονται και αιάρκει αισχύος τους  2 ευθύνες υπό πις σχεπικές απαιτήσες της Δεθνούς Σύμβασης Γραμμών Φόρτωσης, 1966, όπως έχει τροποπαιηθεί  3 ευθύνες υπό πις σχεπικές απαιτήσες της Δεθνούς Σύμβασης για την Ασφάλεια της Ζωής στην Θάλασσα, 1974, όπως έχει τροποπαιηθεί  4 ευθύνες υπό την Δεθνή Σύμβαση για την Πρόληψη της Ρύπανσης από Πλοία, όπως έχει τροποπαιηθεί  5 ναυπλακές δηλώσεις υγείας και απαιτήσεις Δεθνών Κανονσμών Υγείας  6 ευθύνες υπό αεθνή όργαναι που έχουν επίπτωση στην ασφάλεια του πλοίου, επιβατών, πληφώματος και φορτίου  7 μέθοδα και βοηθήμαται πρόληψης ρύπανσης του θαλασσίου περβάλλοντος από πλοία	Εξέταση και αξιολόγηση αποδεικτικών στα χείων που λαμβάντονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομα ωτή, όπου απα τείτα	Οι διαδικασίες παρακολούθησης των εργασιών και συντήρησης νομοθεσίας απα πήσεις Ενδεχόμενη μη αυμμόρφωση αμαγνωρίζεται πλήρως και ε-γκαίρως Προγραμματισμένη ανανέωση και επέκταση των πατοπαιηνιών εξα-σφαλίζει συνεχήτοχύ των ειδών και εξοπλισμού που επιθεωρούνται

pd ( )	T-41-0	Twish 2	Στήλη 4
Στήλη 1	Στήλη 2 Γνώση, κατανόηση κα επάρκει α	Στήλη 3 Μέθοδα επίδε ξης ικανότητας	Κα τήα α αξ ολόγησης της ι κανότητας
Διατήρηση ασφάλειας κα προστασίας του πληρώμα- τος πλοίου κα επιβατών και της λειτουργικής κατά- ατασης σωστικών, πυρο- αβεστικών και άλλων συ- στημάτων ασφαλείας.	Λεπτομερής γνώση των κανο- ναμών σωστικών συσκευών (Διεθνής Σύμβαση για την Α- σφάλεια της Ζωής στην Θά- λασσα)  Οργάνωση γυμνασίων πυρκα- γιάς και εγκατάλειψης πλοίου  Συντήρηση της λειτουργκής κατάστασης των συστημάτων ἄ άσωσης, πυρόσβεσης και άλλων συστημάτων ασφαλείας  Ενέργεις που πρέπει να γίνο- νται για τη προστασία και προ- φύλαξη όλων των άτόμων που επιβαίνουν στο πλοίο σε περί- πτωση επείγουσας ανάγκης.	Εξέταση κα αξιολόγηση στα χείων που λαμβάνο- ντα από πρακτική εκποί- δευση κα εγκεκαμένη εκποίδευση κα εμπαρία κατά την υπηρεσία	Διαδικασίες παρακολούθησης συστημάτων πυρανίχνευσης και ασφάλας εξασφαλίζουν όπι όλα α συναγερμοί εντοπίζονται έγκα ρα και λαμβάνονται μέτρα σύμφωνα με καθερωμένες διαδικασίες έκτακτης ανάγκης
-	Ενέργεες για περιορισμό ζημίας και τη διάσωση του πλοίου μετά από πυρκαγιά, έκρηξη, σύγκρουση ή προσά- ραξη		
Ανάπτυξη σχεδίων έκτα- κτης ανάγκης και ελέγχου ζημών και χειρισμός κατα- στάσεων έκτακτης ανάγκης	Προετα μασία σχεδίων έκτακτης ανάγκης για ανταπόκη αη σε περιπτώσεις έκτακτης ανάγκης Κατασκευή πλοίου περιλαμβα- νομένου ελέγχου ζημιών	Εξέτσση και αξιολόγηση αποδεκτικών στα χείων που λαμβάνονται από εγκεκμ μένη εκπαίδευση και εμπειρία κατά την υπηρεσί- α.	Οι διαδικασίες ανάγκης είναι σύμφωνες με τα θεσπισμένα σχέδια για καταστάσεις έκτακτης ανάγκης.
	Μέθοδα κα βοηθήματα πρό- ληψης πυρκαγιάς, πυρανίχνευ- σης και πυρόσβεσης Λειτουργίες και χρήση σωστι- κών συσκευών		
Χρήση ηγετικών και διακη- τικών ικανοτήτων	Γνώση ἄαχείρισης και εκτιαί- δευσης προσωπικού πλοίου Γνώση σχετικών ἄεθνών ναυ- πλιακών συμβάσεων και συ- στάσεων και εθνικής νομοθε- σίας	Αξιολόγηση αποδεικτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:	Το πλήρωμα έχει κατανεμημένα καθήκοντα και είναι ενημερωμένο για τα αναμενόμενα πρότυπα εργασίας και συμπεριφοράς κατά τρόπο κατάλληλο για τα ενδιαφερόμενα ότομα
	Ικανότητα εφαρμογής διαχείρ - σης καθηκόντων και φόρτου εργασίας περιλαμβανομένων:	.2 εγκεκριμένη εμπαρία κατά την υπηρεσία .3 εγκεκριμένη εκπαίδευση σε προσομαωτή	Ο στόχα εκπαίδευσης και α δραστημότητες βασίζονται στην αξιολόγηση της τρέχουσας ικανότητας και τις δυνατότητες και λειτουργικές απαιτήσεις
	.1 σχεδιασμού και συντονισμού .2 ανάθεσης καθηκόντων προσωπικού		Ο λατουργίες παρουσιάζονται σύμφωνα με τουςταχύοντες κα- νόνες
	.3 περιορισμών χρόνου και πόρων		
	.4 καθορισμού προτερα οτήτων		

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ικανότητας	Κριτήρια αξιολόγησης της ικανότητας
Χρήση ηγετικών κα διακη- τικών (κανοτήτων (συνέχεια)	Γνώση κα ικανότητα εφαρμο- γής αποτελεσματικής διαχεία - σης πόρων:		
	.1 κατανομή, ανάθεση κα κα- θορισμόςπροτερα οτήτων των πόρων		
	.2 αποτελεσματική επικανωνία στο πλοίο και στην ξηρά		
	.3 α αποφάσες αντανακλούν την εξέταση εμπειριών της ο- μάδας		Οι λατουργίες σχεδιάζονται και α πόρα διατίθενται όπως απαιτείται με ορθή προτεραιότητα για να εκτελεστούν τα απαραίτητα καθήκοντα
	.4 δυναμ σμός και ηγεσία περι . λαμβανομένης της παροχής κινήτρου		Η επικανωνία δίνεται και λαμβάνεται με σαφή και αδιαμφισβήτητο τρόττο
	.5 απόκτηση και διατήρηση επίγνωσης της κατάστασης		
	Γνώση κα ικανότητα εφαρμο- γής τεχνικών λήψης αποφάσε- ων:		Δεκνύοντα αποτελεσματικές συμπεριφορές ηγεσίας
	.1 αξολόγηση κατάστασης και κνδύνου		Τα απαραίτητα μέλη της ομάδας κατανοούν την υφιστάμενη κα προβλεπόμενη κατάσταση και τη λατουργική κατάσταση του πλοί-
	.2 προσδιορισμός και παρα- γωγή επιλογών		ου και του εξωτερικού περιβάλ- λοντος
	.3 επιλογή σχεδίου δράσης		Οι αποφάσεις είναι οι αποτελε-
	.4 αξολόγηση αποτελεσματι- κότητας έκβασης		Οι λειτουργίες έχουν αποδειχθεί αποτελεσματικές και σύμφωνα
	Ανάπτυξη, εφαρμογή και επί- βλεψη πρότυπων διαδικα- σιών λατουργίας		με τους ισχύοντες κανόνες
Οργάνωση κα διαχείριση της παροχής ιατρικής φρο- νήδας-στο πλοίο:	Λεπτομερής γνώση της χρή- σης και των περιεχομένων των παρακάτω εκδόσεων:	Εξέταση και αξιολόγηση αποδεικτικών στα χείων που λαμβάνονται από ε- γκεκα μένη εκπαίδευση	Τα μέτρα που λαμβάνοντα και α ἄαἄ κασίες που ακολουθούνται εφαρμόζονται σωστά και κάνουν πλήρη χρήση των διαθέσιμων
	.1 Διεθνής Ιατακός Οδηγός για Πλοία ή ισοδύναμες εθνικές εκδόσεις		συμβούλων
	.2 Ιατρικό τμήμα του Διεθνούς Κώδικα Σημάτων		
	.3 Ιατρικός Οδηγός Πρώτων Βοηθειών για Χρήση σε Ατυχή- ματα που αφορούν Επικίνδυνα Φορτία		

Ο σχεικές πρότυπες σαρές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταμασίο των εκπαιδεύσεων

#### TMHMA A - II/3

Υποχρεωτικές ελάχιστες απαιτήσεις για πιστοποίηση αξιωματικών που είναι υπεύθυνοι φυλακής ναυσιπλοΐας και πλοιάρχων πλοίων κάτω των 500 ο.χ. που εκτελούν παράκτιους πλόες

#### ΑΞΙΩΜΑΤΙΚΟΣ ΥΠΕΥΘΎΝΟΣ ΦΥΛΑΚΉΣ ΝΑΥΣΙΠΛΟΪ́ΑΣ

#### Πρότυποι κανότητας

- 1 Κάθε υποψήφιος για πιστοποίηση:
  - .1 θα απαιτείται να επιδεικνύει την ικανότητα ανάληψης σε επιχειρησιακό επίπεδο, των εργασιών, καθηκόντων και ευθυνών που παρατίθενται στην στήλη 1 του πίνακα Α-ΙΙ/3,
  - .2 θα διαθέτα τουλάχιστον το κατάλληλο πιστοποιητικό για την εκτέλεση ραδιοεπικοινωνιών VHF σύμφωνα με τις απαιτήσεις των Κανονισμών Ραδιοεπικοινωνιών, και
  - .3 άν ορισθεί να έχει την κύρια ευθύνη των ραδιοεπικοινωνιών κατά την διάρκεια περιστατικών κινδύνου, θα διαθέτει κατάλληλο πιστοποιητικό που εκδόθηκε ή αναγνωρίστηκε σύμφωνα με τις διατάξεις των Κανονισμών Ραδιοεπικοινωνιών.
- 2 Η ελάχιστη γνώση, κατανόηση και επάρκεια που απαιτείται για πιστοποίηση παρατίθεται στην στήλη 2 του πίνακα Α-II/3.
- 3 Το επίπεδο γνώσης των θεμάτων που παρατίθενται στη στήλη 2 του πίνακα Α-ΙΙ/3 θα είναι επαρκές για να είναι σε θέση ο υποψήφιος να υπηρετεί υπό την ιδιότητα του αξιωματικού υπευθύνου φυλακής ναυσιπλοΐας.
- 4 Η εκπαίδευση και εμπειρία για να επιτευχθεί το απαραίτητο επίπεδο θεωρηπκών γνώσεων, κατανόησης και επάρκειας θα βασίζονται επίσης στο τμήμα Α-VIII/2, μέρος 4-1~ Αρχές που πρέπει να τηρούνται κατά την τήρηση φυλακής ναυσιπλοΐας και θα λαμβάνουν επίσης υπόψη τις σχετικές απαιτήσεις αυτού του μέρους και τις οδηγίες που δίνονται στο μέρος Β αυτού του Κώδικα.
- 5 Κάθε υποψήφιος για πιστοποίηση απαιτείται να προσκομίσει αποδεικτικά στοιχεία ότι έχει επιτύχει το απαιτούμενο πρότυπο ικανότητας σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που παρατίθενται στις στήλες 3 και 4 του πίνακα Α-ΙΙ/3.

#### Ει δι κή εκπαίδευση

- 6 Κάθε υποψήφιος για πιστοποίηση ως αξιωματικός υπεύθυνος τήρησης φυλακής ναυσπλοΐας σε πλοία κάτω των 500 σ.χ., που εκτελούν παράκτιους πλόες, ο οποίος, σύμφωνα με την παράγραφο 4.2.1. του κανονσμού ΙΙ/3, απαιτείται να έχει ολοκληρώσει ειδική εκπαίδευση, θα ακολουθεί εγκεκριμένο πρόγραμμα εκπαίδευσης σε πλοίου το οποίο:
  - .1 εξασφαλίζει ότι κατά την διάρκεια της απαιτουμένης θαλάσσιας υπηρεσίας ο υποψήφιος λαμβάνει συστηματική πρακτική εκπαίδευση και εμπειρία στις εργασίες, καθήκοντα και ευθύνες αξιωματικού υπεύθυνου τήρησης φυλακής ναυσιπλοΐας λαμβάνοντας υπόψη τις οδηγίες που δίνονται στο τμήμα Β-11/1 αυτού του Κώδικα,
  - .2 επιτηρείται στενά και παρακολουθείται από προσοντούχους αξιωματικούς στα πλοία όπου πραγματοποιείται η εγκεκριμένη θαλάσσια υπηρεσία, και
  - \_3 είναι επαρκώς συμπληρωμένο το βιβλίο εγγραφών εκπαίδευσης ή παρόμαιο έγγραφο\*.

<sup>\*</sup> α σχεικές πρότυπες συρές εκπαίδευσης ΙΜΟ και το παρόμαιο έγγραφο που παράγεται από τη Διεθνή Ναυπλιακή Ομοσπονδία μπορούν να είναι χρήσιμα για την προεταιμασία του βιβλίου εγγραφών εκπαίδευσης

#### ΠΛΟΙΑΡΧΟΣ

7 Κάθε υποψήφιος για πιστοποίηση ως πλοίαρχος σε πλοία κάτω των 500 ο.χ., που εκτελούν παράκτιους πλόες, θα πληροί τις απατήσεις για αξιωματικό υπεύθυνο φυλακής ναυσιπλοΐας που παρατίθενται παρακάτω και επιπρόσθετα, θα απαιτείται να προσκομίζει αποδεικτικά στοιχεία γνώσεων και ικανότητας για να εκτελεί όλα τα καθήκοντα τέτα ου πλοίαρχου.

Πίνακας Α-ΙΙ/3

Προδιαγραφές ελάχι στου προτύπου ι κανότητας για αξιωματικούς υπεύθυνους τήρησης φυλακής ναυσιπλοΐας και για πλα άρχους σε πλοία κάτω των 500 ο.χ. που εκτελούν παράκτιους πλόες

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκεια	Μέθοδα επίδα ξης ι κανότητας	Κα τήα α αξιολόγησης της ικανότητας
Σχεδασμός κα προγματο- ποίηση παράκπου πλου κα  προσδορισμός στίγματος  Σημείωση: Εκπαίδευση κα  αξιολόγηση στη χρήση  ΕCDIS δεν απατείτα για  όσους υπηρετούν  αποκλειστικά σε πλοία που  δεν είναι εφοδιασμένα με  ECDIS. Οι περιορισμοί  αυτοί θα αντανακλώντα  στην θεώρηση που θα  εκδίδεται στον ενδιαφερό- μενο ναυπκό	Κανότητα προσά ορ αρού του σήγματος του πλοίου χρησιμα- παώντας:  .1 σημεία ξηράς  .2 βοηθήματα ναυαπλοΐας, περ λαμβανομένων φάρων, σημαντήρων και ραδιοφάρων  .3 στίγμα αναμέτρησης, λαμβάνοντας υπόψη ανέμους, παλίρραες, ρεύματα και εκπιμώμενη ταχύτητα.  Εμπερασιατωμένη γνώση και κανότητα χρήσης ναυπκών χαρτών-και εκδόσεων-όπως, οδηγίες ναυαπλοΐας, πίνακες παλιρραών, οδηγίες προς ναυπλομένους, ραδιοναυπλακών προαδοπαίρεων και πληροφορίες πορείας πλοίου  Αναφορά σύμφωνα με τις Γενκές Αρχές για Συστήματα Αναφοράς Πλοίων και διαδικασίες VTS  Σημείωση: Το τιμήμα αυτό απαιτείται μόνο για την τιστοποσίηση πλαιάρχου Προγραμματισμός πλου και συνθήκες με αποδεκτές μεθόδους υποτύπωσης παράκτων διαδρομών λαμβάνοντας υπόψη π.χ.:  .1 περιορισμένα ύδατα	Εξέταση και αξιολόγηση αποδακτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπερία κατά την υπηρεσία  .2 εγκεκριμένη εκπαίδευση σε προσομα ωπή, όπου απα τείτα  .4 εγκεκριμένη εκπαίδευση εξοπίναμού εργαστηρίου.  Με χρήση: καταλόγων, χαρτών, ναυτικών εκδόσεων, ραδιοναυτίνα καίν προσδαπα ήσεων ραδιοναυσι πλοΐας, εξάντα, αξιμουθικού κατόπτρου, ηλεκτρονικού εξοπίναμού ναυα πλοΐας, ηχοβοίν στικού εξοπίναμού, πυξίδας	Πληροφορίες που λαμβάνοντα από ναυπκούς χάρτες κα εκδόσας, είνα σχεπκές, ερμηνεύοντα αωστά κα εφαρμόζοντα κατάλληλα  Η κύμα μέθοδος προσά ορσμού στίγματος του πλοίου είνα η πλέον κατάλληλη για πς επικρατούσες καταστάσες και συνθήκες  Το στίγμα προσά ορίζεται εντός των αποδεκτών ορίων σφαλμάτων του οργάνου! συστήματος  Η αφοπιστία των πληροφορών που λαμβάνοντα από την κύρα μέθοδο προσά ορσμού στίγματος ελέγχεται σε κατάλληλα διαστήματα  Ο υπολογισμοί και μετρήσες τω πληροφορών ναυσιπλοΐας είναι ακριβείς  Ο χάρτες και εκδόσαις που επικλέγονται είναι της μεγίστης κλίμα κας επί του πλοίου και είναι κατάλληλα για την περιοχή που γίνεται η ναυσιπλοΐα και αι χάρτε διορθώνονται σύμφωνα με πς πλέον πρόσφατες διαθέσιμες πληροφορίες

	.3 πάγους		
r	.4 περιορισμένη ορατότητα		-
	.5 συστήματα διαχωρισμού κυκλοφορίας	·	·

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
<b>Ικανότητα</b>	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ι κανότητας	Κριτήρα αξιολόγησης της ικανότητας
Σχεδιασμός και πραγματο- ποίηση παράκτιου πλου και προσδιορισμός στίγματος (συνέχειαι)	.6 περιοχές Υπηρεσίας Κυκλοφορίας Πλοίων (VTS) .7 περιοχές εκτεταμένων παλρρα ακών επιπτώσεων Σημείωση: Το τμήμα αυτό απατείτα μόνο για την πιστοποίηση ως πλοίαρχος Εμπεριστατωμένη γνώση και κανότητα χρήσης ECDIS	Εξέταση και αξιολόγηση των αποδεικτικών στα χεί- ων που λαμβάνονται από ένα ή περισσότερα από τα	
		ακόλουθα: .1 εγκεκριμένη εμπαρία εκπαίδευσης πλοίου .2 εγκεκριμένη εκπαίδευση ση σε προσομαωτή ΕC-DIS	
	Εξοπλισμός και βοηθήματα ναυσιπλοΐας Ικάνότητα ασφαλούς χειρισμού και προσά ορισμός του σήγματος του πλοίου με χρήση όλων των βοηθημότων ναυσιπλοΐας και του εξοπλισμού που είναι συνήθως εγκατεστημένος στα ενά αφερόμενα πλοία	Αφολόγηση στα χείων που λαμβάνονται από εγκεκριμένη εκπαίδευση σε προσομαιωτή ραντάρ	Η πραγματοποίηση ελέγχων κα δοκιμών των συστημάτων ναυαπλοΐας είναι σύμφωνη με τις συστάσεις των κατασκευαστών, την καλή πρακτική ναυα πλοΐας κα τις αποφάσεις του ΙΜΟ όσον αφορά τα πρότυπα απόδοσης εξοπλισμού ναυαπλοΐας  Η ερμηνεία και ανάλυση των πληροφορών που λαμβάνονται από το ραντάρ είναι σύμφωνη με την αποδεκτή πρακτική ναυαπλοΐας και λαμβάνει υπόψη τα όρα και τα επίπεδα ακριβείας του ραντάρ
	Πυξίδες Γνώση των σφαλμάτων και ά ορθώσεων μαγνητικών πυξίδων Ικανότητα προσά ορ ομού των σφαλμάτων της πυξίδας με χρήση επίγειων μέσων και περθώριο για τέτα ου είδους σφάλματα		Τα σφάλματα μαγνητικών πυξί- δων προσά ορίζονται και εφαρ- μόζονται σωστά σε πορείες και ὰ οπτεύσεις
	Αυτόματος πιλότος Γνώση συστημάτων αυτόματου πιλότου και διαδικασιών αλλαγής από χειροκίνητο σε αυτόματο έλεγχο και αντίθετα, ρύθμιση των ελέγχων για βέλπιστη λειτουργία		Η επιλογή τρόπου πηδαλιουχίας είναι η πλέον κατάλληλη για πς επικρατούσες καιρικές συνθήκες, κατάσταση θόλασσας και κυκλο- φορίας και ελιγμούς που προτίθε ται να πραγματοπαιήσει το πλοίσ

Μετεωρολογία   Ικανότητα χρήσης και ερμη- νείας πληροφοριών που λαμ- βάνοντα από μετεωρολογικά όργανα επί πλοίου	Οι μετρήσεις και παρατηρήσεις των και ακών συνθηκών είναι ακριβείς και πρόσφορες για τον πλου
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Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
<b>Ικανότητα</b>	Γνώση, κατανόηση κα επάρκει α	Μέθοδα επίδα ξης ι κανότητας	Κα τήα α αξιολόγησης της ικανότητας
Σχεδιασμός και πραγματο- ποίηση παράκπου πλου και προσδιορισμός στίγματος (συνέχειαι)	Γνώση των χαρακτηροτικών δάφορων κα ρικών συστημά- των, διαδικασιών αναφοράς κα συστημάτων καταγραφής Ικανότητα εφαρμογής διαθέ- α μων μετεωρολογικών πλη- ροφοριών		Ο μετεωρολογικές πληροφορίες αξολογούντα και εφαρμόζονται για να διατηρηθεί ο ασφαλής πλους του πλοίου
Τήρηση ασφαλούς φυλακής ναυσ πλοΐας	Τήρηση φυλακής Λεπτομερής γνώση του περεχομένου, εφαρμογής κα σκοπού των Δεθνών Κανονισμών για την Αποφυγή Συγκρούσεων στην Θάλασσα, 1972, όπως έχουν τροποπα ηθεί Γνώση περιεχομένου των Βασκών Αρχών που πρέπα να τηρούνται κατά την τήρηση φυλακής ναυα πλοίας Χρήση σχεδιασμού πορείας σύμφωνα με τις Γενικές Διατάξας Πορείας Πλοίων Χρήση αναφοράς σύμφωνα με τις Γενικές Αρχές για Συστήματα Αναφοράς Πλοίων και με διαδικασίες VTS	Εξέταση και αξιολόγηση αποδεικιών στα χείων που λαμβάνονται από έναι ή περισσότερα από τα ακόλουθα:  1 εγκεκριμένη εμπειρία κατά την υπηρεσία 2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου 3 εγκεκριμένη εκπαίδευση σε προσομαιωτή, όπου απαιτείτα 4 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου	Η πραγματοποίηση, παράδοση κα αντικατάσταση σε καθήκοντα φυλακής συμμορφώνονται με αποδεκτές αρχές και διαδικασίες Τηρείται κατάλληλη φυλακή οπτήρα πάντοτε και σύμφωνα με αποδεκτές αρχές και διαδικασίες Φανοί, σχήματα και ηχητικά σήματα συμμορφώνονται με τις απατήσες που περιέχονται στους Διεθνείς Κανονι σμούς Αποφυγής Συγκρούσεων στην Θάλασσα, 1972, όπως έχουν τροποπαηθεί και αναγνωρίζοντοι σωστά Η αυχνότητα και έκταση παρακοι λούθησης της κυκλοφορίας, το πλοίο και το περιβάλλον συμμορφώνονται με αποδεκτές αρχές και διαδικασίες Οι ενέργειες αποφυγής προσέγγισης και σύγκρουσης με άλλαι πλοία είναι σύμφωνες με τους Διεθνείς Κανονι σμούς Αποφυγής Συγκρούσεων στην Θάλασσα, 1972, όπως έχουν τροποπαιηθεί νονται έγκαι ρα και σύμφωναι με αποδεκτές διαδικασίες ναυσπλοΐας και ή ταχύτητας λαμβά νονται έγκαι ρα και σύμφωναι με αποδεκτές διαδικασίες ναυσπλοΐας την το πλοίας του πλοίου Η ευθύνη για την ασφαλή ναυσπλοΐα του πλοίου και όταν το πλοίο είναι στη γέφυρα και όταν το πλοίο είναι στη νέφυρα και όταν το πλοίο είναι στο πλοίο είνα

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδε ξης ι κανότητας	Κα τήα α αξιολόγησης της ικανότητας
Ανταπόκρ ση σε καταστάσας έκτακτης ανάγκης.	Δαᾶκασίες έκτακτης ανάγκης που περιλαμβάνουν:  1 προληπικά μέτρα για την προστασία και ασφάλεια των επιβατών σε καταστάσεις έκτακτης ανάγκης  2 αρχική αξιολόγηση ζημιών και έλεγχος ζημιών  3 μέτρα που πρέπει να λαμβάνονται μετά από προσάραξη.  Επιπρόσθετα, η εξής άλη θα περιλαμβάνεται στην πιστοποίηση για πλοίαρχο:  1 πηδαλιουχία έκτακτης ανάγκης  2 ρυθμίσεις ρυμούλκησης και για υποβολή σε ρυμούλκηση  3 άσωση ατόμων από τη θάλασσα  4 παροχή βοήθειας σε πλοίο που κινδυνεύει  5 αξιολόγηση ενεργειών που πρέπει να γίνονται ότον προκύπτουν καταστάσεις έκτακτης ανάγκης σε λιμένα	Εξέταση και αξιολόγηση στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπα ρία κατά την υπηρεσία  .2 εγκεκριμένη εμπα ρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομαωτή, όπου απα τείτα  .4 πρακτικές οδηγίες	Ο τύπος και η κλίμακα έκτακτης ανάγκης αναγνωρίζεται έγκα ρα Ο αρχικές δράσεις, και κατά περίπτιωση, αι ελίγμοι, είναι σύμφωνα με τα σχέδια ανάγκης και είναι κατάλληλα για το επείγοντα χαρακτήρα της καιάστασης και τη φύση της έκτακτης ανάγκης
Ανταπόκριση σε σήμα κιν- δύνου στη θάλασσα	Ερευνα και διάσωση Γνώση των περιεχομένων του Διεθνούς Εγχειρότου Αεροναυ- πκής και Θαλάσσιας Έρευνας και Διάσωσης (IAMSAR).	Εξέταση και αξιολόγηση αποδακτικών στα χείων που λαμβάνονται από πρακτική οδηγίες ή εγκε- κριμένη εκπαίδευση σε προσομαιωτή, όπου απα- τείται	Αναγνωρίζεται άμεσα το σήμα κνδύνου ή έκτακτης ανάγκης  Τα σχέδια ανάγκης και αι οδηγίες σε πάγες διαταγές εφαρμόζονται και υπάρχει συμμόρφωση με αυτές
Ελιγμοί πλοίου και λειτουρ- γία εγκαταστάσεων μικρής εαχύος πλοίων	Ελιγμοί και χαρισμός πλοίου  Γνώση παραγόντων που επι- δρούν σε ασφαλείς ελιγμούς και χα α σμούς πλοίου  Λα τουργία εγκαταστάσεων	Εξέταση και αφολόγηση αποδεκτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:	Τα ασφαλή όρια λειτουγίας των συστημάτων πρόωσης, πηδα- λουχίας και σχύος δεν υπερβαί- νονται σε συνήθεις ελιγμούς Οι ρυθμίσεις που γίνονται στην πορείαι και ταχύτηται του πλοίου
	μκρής ισχύος πλοίων και βοηθητικών μηχανών Κατάλληλες ἄαδικασίες αγκυροβολίας και πρόσδεσης	κατά την υπηρεσία .2 εγκεκριμένη εμπαρία εκπαίδευσης επί πλοίου .3 εγκεκριμένη εκπαίδευση σε προσομαιωτή, όπου απαιτείτα	αστηρούν την ασφάλεια ναυσι- πλοΐας  Η κύμα εγκατάσταση, τα βοηθη- πκά μηχανήματα και ο εξοπλι- αμός λειτουργούν σύμφωνα με πς τεχικές προδιαγραφές και πάντοτε εντός των ορίων ασφα- λούς λειτουργίας

# Λα τουργία: Χα ρισμός φορτίου και στα βασία σε επιχα ρησιακό επίπεδο

Στήλη 1	Στήλη 2	Στήλη 3 Στήλη 4  Μέθοδα επίδε ξης Κριτήρα αξιολόγηο της ικανότητας	Στήλη 2 Στήλη 3 Σ	Στήλη 4
	Γνώση, κατανόηση κα επάρκε α		Κα τήα α αξ ολόγησης της ικανότητας	
Παρακολούθηση φόρτω- σης, στα βασίας, ασφάλ- σης και εκφόρτωσης φορ- τίων και η φροντίδα τους κατά την διάρκεια του πλου	Χειρισμός φορτίου, στοιβασία και ασφάλιση Γνώση ασφαλούς χειρισμού, στα βασίας και ασφάλισης φορτίων περιλαμβανομένων των επικίνδύνων, οχληρών και επιπτώσεων τους στην ασφάλασιης ζωής και του πλοίου Χρήση του Δεθνούς Ναυπλακού Κώσ και Επικινδύνων φορτίων (IMDG)	Εξέταση κα αξιολόγηση αποδεκτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου .3 εγκεκριμένη εκπαίδευση σε προσομαωτή, όπου απαιείτα	Οι εργασίες φορτίου γίνονται αύμφωνα με το σχέδιο φορτίου ή άλλα έγγραφα και θεσπισμένους κανόνες/ κανονισμούς ασφαλείας, οδηγίες λει του πλοίου περιορισμούς ατα βασίας  Ο χειρισμός επικινδύνων, οχληρών και βλαβερών φορτίων αυμμορφώνεται με διεθνείς κανονισμούς και αναγνωρισμένα πρότυπα και κώδικες ασφαλούς προκτικής	

# Λα τουργία: Έλεγχος της λα τουργίας του πλοίου και φροντίδα επι βα νόντων σε επιχα ρησιακό επίπεδο

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ι κανότητας	Κριτήρια αξιολόγησης της ικανότητας
Εξασφάλιση συμμόρφωσης με τις απαιτήσεις πρόληψης ρύπανσης	Πρόληψη ρύπανσης στο θα- λάσσιο περιβάλλον και ανπρ- ρυπαντικές διαδικασίες Γνώση των προληπτικών μέ- τρων που πρέπα να λαμβάνο- νται για να προλαμβάνετα ρύπανση του θαλάσσιου περι- βάλλοντος Ανπρρυπαντικές διαδικασίες και όλος ο σχετικός εξοπλι-	Εξέταση και αφολόγηση αποδεικτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου	Ο δαδκασίες παρακολούθησης των επί του πλοίου εργασιών και η εξασφάλιση συμμόρφωσης με πς απατήσεις MARPOL τηρού- ντα πλήρως
Διατήρηση αβοπλοίας του πλοίου	Ευστάθεια πλοίου  Λειτουργική γνώση και εφαρμογή πινάκων και διαγραμμότων ευστάθειας, διαγωγής και τάσεων και εξοπλισμού υπολογισμού τάσεων  Κατανόηση βασικών ενεργειών που πρέπει να αναλαμβόνονται σε περίπτωση μερικής απώλειας της ακέραιης πλευστότητας  Κατανόηση βασικών αρχών υδατοστεγούς ακεραιότητος  Κατασκευή πλοίου  Γενική γνώση των βασικών	Εξέταση και αξιολόγηση αποδεικτικών στα χείων του λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομαωτή, όπου απαιτείτα  .4 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου	Οι συνθήκες ευστάθαιας συμμορφώνονται με τα κριτήρια ακέραιτς ευστάθαιας του ΙΜΟ υπό όλες τις συνθήκες φόριωσης Οι ενέργαες για την εξασφάλιση και διατήρηση της υδατοστεγούς ακεραιότητας του πλοίου είναι σύμφωνες με την αποδεκτή πρακτική

κατασκευαστικών μερών πλοί-		
ου και τα αωστά ονόματα των		
αιοφόρων μερών	,	

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ι κανότητας	Κα τήα α αξιολόγησης της ικανότητας
Πρόληψη, έλεγχος πυρκαγ φάς και πυρόσβεση στο πλοίο	Γιρόληψη πυρκαγιάς και συσκευές πυρόσβεσης  Ικανότητα οργάνωσης γυμνασίων πυρκαγιάς  Γνώση των κατηγοριών και της χημείας πυρκαγιάς  Γνώση συστημάτων πυρόσβεσης  Κατανόηση ενεργαιών που πρέπαι να λαμβάνονται σε περίπτωση πυρκαγιάς που αφορά συστήματα πετρελαίου	Αβολόγηση αποδεκτικών σταχείων που λαμβάνοντα από εγκεκαμένη εκπαίδευση πυρόσβεσης και εμπερίας όπως καθορίζεται στο τμήμα Α-VI/3.	Ο τύπος και η κλίμακα του προβλήματος προσά ορίζονται άμεσα και α αρχικές δράσεις συμμορφώνονται με τη διαδικασία έκτα-κτης ανάγκης και τα σχέδα έκτα-κτης ανάγκης και το πλοίο  Ο διαδικασίες εγκατάλειψης, διακοπής λειτουργίας έκτακτης ανάγκης και απομόνωσης είναι κατάλληλες για την φύση της έκτακτης ανάγκης και εφαρμόζονται άμεσα  Ο βαθμός προτεραιότητας και τα επίπεδα και χρονικάι όρια σύντα-ξης αναφορών και πληροφόρησης απροσωπικού επί του πλοίου είναι σχετικά με την φύση της έκτακτης ανάγκης και αντικατοπτρίζουν το επείγον του προβλήματος
Λειουργία συσκευών διά- σωσης	Διάσωση  Ικανότητα οργάνωσης γυμνασίων εγκατάλειψης πλοίου και γνώση της λειτουργίας συσκευών ά άσωσης και λέμβων ά άσωσης, των συσκευών και ρυθμίσεων καθέλκυσής τους και του εξοπλισμού τους, πεμαμβανομένων των συσκευών ά άσωσης ραδιοετικανωνίας, δορυφορικών ΕΡΙRBs, SARTs, στολών εμβάππισης και θερμικών προστατευτικών βοημάτων	Αξιολόγηση αποδεικτικών στα χείων που λαμβάνοντα από εγκεκαι μένη εκπαί-δευση κα εμπειρία όπως καθορίζονται στο τμήμα Α-Vi/2 παράγραφα 1 - 4	Ο ενέργαες ανταπόκα σης εγκατάλαψης τελοίου και καταστάσας διάσωσης είναι κατάλληλες για τις επικρατούσες συνθήκες και καταστάσας και είναι σύμφωνες με αποδεκτές πρακτικές και πρότυπα ασφαλείας
Παροχήτατα κών πρώτων βοηθειών σε πλοίο	Ιατρικές βοήθειες Πρακτική εφαρμογή ιατρικών οδηγιών και συστάσεων που λαμβάνονται με ραδιοεπικανωνότητας λήψης αποτελεσματικών ενεργειών που βασίζονται σε αυτή τη γνώση σε περίπτωση ατυχημάτων ή ασθενειών που είναι πιθανό ναι συμβούν στο πλοίου	Αξιολόγηση αποδεικτικών στα χείων που λαμβάνονται από εγκεκριμένη εκπαίδευ- ση όπως καθορίζεται στο τμήμα Α-VI/4 παραγράφαι 1 έως 3	Η αναγνώριση πιθανών απών, φύσης και έκτασης τραυμαπ- σμών ή συνθηκών είναι ταχεία και η θεραπεία ελοχιστοπα εί την άμεση απειλή για τη ζωή
Παρακολούθηση συμμόρ- φωσης με νομοθεπκές απα τήσεις	Βασκή εργασιακή γνώση σχεπκών συμβάσεων ΙΜΟ που αφορούν στην ασφάλεια (safety) της ζωής στη θάλασσα, στην ασφάλεια (security) κα στην προστασία και την προστασία του θαλασσίου περιβόλλοντος	Αξιολόγηση αποδεικτικών στα χείων που λαμβάνονται από εξέταση ή εγκεκριμένη εκπαίδευση	Νομοθεπκές απατήσες που σχετίζοντα με την ασφάλεια (safety) της ζωής στη θάλασσα, την ασφάλεια (security) και την προστασία της ζωής στη θάλασ- σα και την προστασία του θα- λασσίου περιβάλλοντος αναγνω- ρίζονται σωστά

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ι κανότητας	Κατήα α αξιολόγησης της ικανότητας
Συμβολή στην ασφάλεια (safety) προσωτεκού και πλοίου	Γνώση τεχνικών προσωπικής επιβίωσης Γνώση πρόληψης των πυρκαγών και κανότητα καταπολέμησης και κατάσβεσης πυρκαγών Γνώση στα χειωδών πρώτων βοηθειών Γνώση προσωπικής ασφαλείας και και νωνικών ευθυνών	Αδ ολόγηση αποδεκτικών στα χείων που λαμβάνοντα από εγκεκα μένη εκπαί- δευση και εμπερία όπως καθορίζονται στο τμήμα Α- VI/1 παράγραφος 2	Ο κατάλληλος προστατευπκός εξοπλισμός κα εξαπλισμός κα εξαπλισμός ασφαλείας χρησιμοπαιούνται αωστά Ο ἄαἄκασίες και ασφαλείς εργασιακές πρακτικές που έχουν σχεδιασθεί για την προστασία τοι προσωπικού και του πλοίου τηρούνται συνεχώς Ο ἄαᾶκασίες που έχουν σχεδιασθεί για την προστασία του περβάλλοντος τηρούνται συνεχώς Ο αρχικές και ακόλουθες ενέργες για την απόκτηση επίγνωσης κατάστασης έκτακτης ανάγκης συμμορφώνονται με πις θεσπισμένες διαδικασίες αντιμετώπισης έκτακτης ανάγκης

#### ΜΕΡΟΣΑ-11/4

Υποχρεωτικές ελάχιστες απαιτήσεις για πιστοποίηση μελών πληρώματος που αποτελούν μέρος φυλακής ναυσιπλοΐας

#### Πρότυποι κανότητας

- 1 Κάθε μέλος πληρώματος που αποτελεί μέρος φυλακής ναυσιπλοΐας σε ποντοπόρο πλοίο 500 ο.χ. ή άνω θα απαιτείται να επιδείξει ικανότητα να εκτελεί τη λειτουργία ναυσιπλοΐας σε επίπεδο υποστήριξης όπως καθορίζεται στη στήλη 1 του πίνακα Α-ΙΙ/4.
- 2 Η ελάχιστη γνώση, κατανόηση και επάρκεια που απαιτείται από μέλη πληρώματος που αποτελούν μέρος φυλακής ναυσιπλοΐας σε ποντοπόρο πλοίο 500 ο.χ. ή άνω παρατίθεται στην στήλη 2 του πίνακα Α-ΙΙ/4.
- 3 Κάθε υποψήφιος για πιστοποίηση θα απαιτείται να παρέχει αποδείξεις ότι έχει επιτύχει το απαιτούμενο πρότυπο ικανότητας σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που καθορίζονται στις στήλες 3 και 4 του πίνακα Α-ΙΙ/4. Η αναφορά σε "πρακτική δοκιμασία" στη στήλη 3 μπορεί να περιλαμβάνει εγκεκριμένη εκπαίδευση ξηράς όπου α εκπαιδευόμενα υφίστανται πρακτική δοκιμασία.
- 4 Όπου δεν υπάρχουν πίνακες ικανότητας για το επίπεδο υποστήριξης σχεπκά με ορισμένες δραστηριότητες, παραμένει στην ευθύνη της Διοίκησης να ορίσει τις κατάλληλες απαιτήσεις εκπαίδευσης, αξιολόγησης και πιστοποίησης που πρόκειται να ισχύουν για προσωπικό που ορίζεται να εκτελεί αυτές τις δραστηριότητες σε επίπεδο υποστήριξης.

#### Πίνακας Α-ΙΙ/4

# Καθορισμός ελάχι στου προτύπου ι κανότητας για μέλη πληρώματος που αποτελούν μέρος φυλακής ναυα πλοΐας

Λα τουργία: Ναυσι πλοΐα σε επίπεδο υποστήμ ξης Στήλη 4 Στήλη 3 Στήλη 2 Στήλη 1 Μέθοδα επίδα ξης Κατήα α αξιολόγησης Γνώση, κατανόηση κα Ικανότητα της ικανότητας. ι κανότητας επάρκεια Αξιολόγηση αποδεκτικών Πηδαλιουχείται σταθερή πορεία Χρήση μαγνητικής και γυρο-Πηδαλιουχία του πλοίου εντός αποδεκτών ορίων έχοντας στα χείων που λαμβάνοντα κα συμμόρφωση με εντοσκοπικής πυξίδας υπόψη την περιοχή ναυσιπλοΐας από: λές σε πηδαλιούχο στην και την επικρατούσα κατάσταση Διαταγές πηδαλιουχίας Αγγλική γλώσσα θάλασσας. Οι μεταβολές στην .1 πρακτική εξέταση, ή πορεία είναι ομαλές και ελεγχό-Αλλαγή από τον αυτόματο π-.2 εγκεκριμένη εμπο ρία DEVEC λότο σε χειροκίνητη πηδαλιουκατά την υπηρεσία, ή χία και αντίστροφα Οι επικανωνίες είναι πάντοτε σαφείς και περιεκτικές και οι δια-.3 εγκεκριμένη εμπαιρία ταγές γνωστοπαιούνται κατά τον εκπαίδευσης επί πλοίου συνήθη σε πλοία τρόπο Ηχητικά σήματα, φανοί και άλλα Αφολόγηση αποδεκτικών Ευθύνες οπτήρα, περιλαμβα-Τήρηση κατάλληλης οπηαντικείμενα αναγνωρίζονται έστα χείων πουλαμβάνοντα νομένης της κατά προσέγγιση κής και ακουστικής φυλαγκαιρα και η διόπτευσή τους σε αναφοράς διόπτευσης ηχητικού από: κής οπτήρα μοίρες ή σημεία αναφέροντα σήματος, φανού ή άλλου ανηστον αξιωματικό φυλακής .1 προκακή εξέταση, ή κυμένου σε μοίρες ή σημεία .2 εγκεκριμένη εμπαρία κατά την υπηρεσία, ή 3. εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου Αξιολόγηση αποδεικτικών Οι επικαινωνίες είναι σαφείς και Όρα και ορισμοί που χρησιμο-Συμβολή στην παρακολούπερεκτικές και αναζητούνται στα χείων που λαμβάνοντα θηση και έλεγχο ασφαλούς παούντα στο πλοίο συμβουλές/ δευκρινίσεις από τον από εγκεκριμένη εμπειρία φυλακής κατά την υπηρεσία ή εγκεαδωματικό φυλακής όπου α Χρήση κατάλληλων εσωτεριπληροφορίες ή οδηγίες περί την κα μένη εμπα ρία εκπαίκών συστημάτων επικανωνιών φυλακή δεν είναι σαφώς κατανοδευσης επί πλοίου και συναγερμών ητές Ικανότητα κατανόησης διατα-Η τήρηση, παράδοση και αντικαγών και επικαινωνίας με τον τάσταση φυλακής είναι σύμφωνη αδωματικό φυλακής για θέματα με αποδεκτές πρακτικές και διασχετικά με τα καθήκοντα τήρηδικασίες σης φυλακής Διαδικασίες για την αντικατάσταση, τήρηση και παράδοση φυλακής Πληροφορίες που απα τούντα για την τήρηση ασφαλούς φυλακής Βασικές διαδικασίες περιβαλλοντής προστασίας Η αρχική ενέργεια μόλις αντιληφ-Αξιολόγηση αποδεικτικών Γνώση καθηκόντων έκτακτης Χαρισμός εξοπλισμού έθεί κατάσταση έκτοκτης ανάγκης στα χείων που λαμβάνοντα κτακτης ανάγκης και εφαραναγκης και σημάτων συναη μη φυσιολογική, είναι σύμφωνη από εγκεκα μένη εμπερία **ύο**μα3γ μογή διαδικασιών έκτακτης κατά την υπηρεσία ή εγκεμε καθερωμένες πρακτικές κα ανάγκης κα μένη εμπα ρία εκπαίδιαδικασίες. Γνώση πυροτεχνικών σημάτων δευσης επί πλοίου κινδύνου, δορυφορικών Οι επικοινωνίες είναι πάντοτε EPIRBs Kar SARTs σαφείς και περιεκτικές και αι διαταγές γνωστοπαιούνται κατά τον Αποφυγή λανθασμένων συνασυνήθη σε πλοία τρόπο γερμών κινούνου και ενέργαες που πρέπα να λαμβάνονται σε Τηρείται πάντοιε η ακεραιότητα περίπτωση τυχαίας ενεργοποίτων συστημάτων συναγερμού ησης έκτακτης ανάγκης και κινδύνου

#### TMHMA A - II/5

Υποχρεωτικές ελάχιστες απαιτήσεις για πιστοποίηση μελών πληρώματος ως ειδικευμένου (able) ναυτικού καταστρώματος

#### Πρότυποι κανότητας

- 1 Κάθε ειδικευμένος (able) ναυτικός καταστρώματος που υπηρετεί σε ποντοπόρο πλοίο 500 ο.χ. ή άνω θα απαιτείται να επιδείξει ικανότητα να εκτελεί λειτουργίες σε επίπεδο υποστήριξης όπως καθορίζεται στη στήλη 1 του πίνακα Α-ΙΙ/5.
- 2 Η ελάχιστη γνώση, κατανόηση και επάρκεια που απαιτείται από ένα ειδικευμένο (able) ναυτικό που υπηρετεί σε ποντοπόρο πλοίο 500 ο.χ. ή άνω παρατίθεται στην στήλη 2 του πίνακα Α-ΙΙ/5.
- 3 Κάθε υποψήφιος για πιστοποίηση θα απαιτείται να παρέχει αποδεικτικά στοιχεία ότι έχει επιτύχει το απαιτούμενο πρότυπο ικανότητας σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που καθορίζονται στις στήλες 3 και 4 του πίνακα Α-ΙΙ/5.

# Πίνακας Α - ΙΙ/5 Καθορισμός του ελάχιστου προτύπου ι κανότητας για μέλη πληρώματος ως ει δι κευμένα (able) ναυτικοί καταστρώματος

Λα τουργία: Ναυα πλοΐα σε επίπεδο υποστήρ ξης

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδε ξης ικα- νότητας	Κριτήρια αξιολόγησης της ι κανότητας
Συμβολή στην τήρηση ασφαλούς φυλακής ναυσιπλοΐας	Ικανότητα κατανόησης διαταγών και επικανωνίας με τον αξιωμα- πικό φυλακής για θέματα σχεπικά με τα καθήκοντα τήρησης φυλα- κής Διαδικασίες για την ανπικατάστα- ση, τήρηση και παράδοση φυλα- κής Πληροφορίες που απαιτούντα	Αξιολόγηση αποδεικτικών στα- χείων που λαμβάνοντα από εγκεκριμένη εμπερία κατά την υπηρεσία ή πρακτική εξέταση	Οι επικανωνίες είναι σαφείς και περιεκτικές Η πήρηση, παράδοση και αντικα- τάσταση φυλακής είναι σύμφωνη με αποδεκτές πρακτικές και διαδικασίες
	για την τήρηση ασφαλούς φυλα- κής		
Συμβολή στον ελλιμε- νισμό, την αγκυροβολία και άλλες εργασίες πρόσδεσης	Λετουργική γνώση του συστήματος πρόσδεσης και σχεπκών διαδικασών, περιλαμβανομένων:  1 της λειτουργίας πρόσδεσης και των σχανιών ρυμούλκησης και πώς κάθε σχανί λειτουργεί ως μέρος ενός συνολικού συστήματος  2 χωρηπκοτήτων, ασφαλών φορτίων εργασίας και φορτίων θραύσης του εξοπλισμού πρόσδεσης περιλαμβανομένων συρμάτων πρόσδεσης, συνθεπικών και φυπικών σχανιών, βαρούλκων, εργατών αγκύρας, συσκευών ανέλκυσης αγκύρας, στήλων, δεστρών και υποστηρίγματων  3 διαδικασιών και σειράς ενεργειών για την πραγματοποίηση ταχείας πρόσδεσης και απόδεσης σχανιών και συρμάτων πρόσδεσης και ρυμούλκησης,	Αξιολόγηση αποδακτικών στα- χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλου- θα:  .1 εγκεκα μένη εμπειρία κατά την υπηρεσία  .2 πρακτική εκπαίδευση  .3 εξέταση  .4 εγκεκα μένη εμπειρία εκπαί- δευσης επί πλοίου  .5 εγκεκα μένη εκπαίδευση σε προσομαωτή, όπου απα τείτα.	Οι εργασίες πραγματοπα ούντα σύμφωνα με καθ ερωμένες πρα- κπκές ασφαλείας και οδηγίες λα- τουργίας εξοπλισμού
	περ λαμβανομένων σχα νών ρυμούλκησης  .4 ἄαᾶκασιών και σε ράς ενεργεών για την χρήση αγκυρών σε α άφορες εργασίες  Λειτουργική γνώση των διαδικασιών και της σε ράς ενεργειών που σχετίζονται με την πρόσδε-		

### Λα τουργία: Χα α σμός φορτίου και στα βασία σε επίπεδο υποστήρι ξης

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
ίκανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδαξηςι κανό- τητας	Κριτήρια αξιολόγησης της ικανότητας
Συμβολή στον χε α- σμό φορπου κα α- ποθεμάτων	Γνώση διαδικασών ασφαλούς χειρομού, στα βασίας και ασφάλσης φορτίων και αποθεμάτων, περιλαμβανομένων επικίνδυνων, οχληρών και επιβλαβών ουσών και υγρών Βασικές γνώσεις και προφυλάξεις προς τήρηση σχεπικά με συγκεκρμένους τύπους φορτίων και αναγνώριση σήμανσης ΙΜDG	Αξιολόγηση των αποδακτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπαρία κατά την υπηρεσία  .2 πρακτική εκπαίδευση  .3 εξέταση  .4 εγκεκριμένη εμπαρία εκπαίδευσης επί πλοίου  .5 εγκεκριμένη εκπαίδευση σε προσορια ωτή, όπου απατείτα	Ο χαρισμοί φορτίου και αποθεμάτων διεξάγονται σύμφωνα με το καθερωμένες διαδικασίες ασφάλασς και τις οδηγίες λαιτουργίας εξοπλισμού Ο χαρισμός των επικίνδυνων, οχληρών και επιβλαβών φορτίων ή αποθεμάτων συμμορφώνεται με τις καθερωμένες πρακκές ασφάλασς

## Λα τουργία: Έλεγχος της λα τουργίας του πλοίου και μέρι μνα επι βαι νόντων σε επίπεδο υποστήρι ξης

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκεια	Μέθοδα επίδαξηςικα- νότητας	Κα τήα α αξ ολόγησης της ι κανότητας
Συμβολή στην ασφαλή λα τουργία του εξοπλ- σμού κα ΄μηχανημάτων καταστρώματος	Ενώση εξοπιλισμού καταστρώματος, συμπερελαμβανομένων: .1 λειτουργίας και χρήσης βαλβίδων και αντλιών, ανελκυστήρων, γερο- νών, φορτωτήρων και του σχεπκού εξοπιλισμού	Αξιολόγηση αποδεικτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα: .1 εγκεκριμένη εμπειρία κατά την υπηρεσία	Οι λειτουργίες ἄενεργούντα σύμφωνα με καθερωμένες πρακτικές ασφάλειας και τις οδηγίες λειτουργίας εξοπλι- σμού
	.2 λειτουργίας και χρήσηςς βαρούλ- κων, εργατών, εργατοκυλίνδρων και του σχετικού εξοπλισμού	.2 πρακτική εκπαίδευση .3 εξέταση	
	.3 καλυμμάτων στομίων κυτών, υδα- τοστεγών θυρών, θυρίδων και σχεπ- κού εξοττλισμού	.4 εγκεκριμένη εμπαρία εκπαί- δευσης επί πλοίου	
	.4 σχανών από ίνες και σύρμα, κα- λωδίων και αλυσίδων, συμπεριλαμ- βανομένης της κατασκευής, χρήσης, σήμανσης, συντήρησης και κατάλλη- λης στα βασίας τους		
	.5 εκανότητας χρήσης και κατανόησης βασικών σημάτων για τη λατουργία εξοπλισμού, συμπεριλαμβανομένων βαρούλκων, γερανών και ανελκυστήρων	Αξιολόγηση αποδεικτικών στα - χείων που λαμβάνονται από πρακτική επίδειξη	Η επικανωνία στον τομέα ευθύνης του χειριστή είναι σταθερά επιτυχής
	.6 ι κανότητας λειτουργίας εξοπλ - αμού αγκυροβολίας κάτω από διά- φορες συνθήκες, όπως αγκυροβολία, ζύγιση άγκυρας, ασφάλιση στη θά- λασσα, και σε καταστάσεις έκτακτης ανάγκης	Αξιολόγηση αποδεικτικών στα- χείων που λαμβάνονται από πρακτική επίδειξη	Η λειτουργία του εξοπλισμού δενεργείτα με ασφάλεια σύμφωνα με τις καθιερωμένες διαδικασίες

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδαξης ικανότητας	Κα τήα α αξιολόγησης της ι κανότητας
Συμβολή στην ασφαλή λειτουργία εξοπλισμού κα μηχανών καταστρώ- ματος (συνέχεια)	Γνώση των ακόλουθων δαδικασών και ικανότητα:  .1 εξαρπισμού ή απεξαρπισμού , καθισμάτων και σκαλωισών ναύκληρου  .2 εξαρπισμού ή απεξαρπισμού κλιμάκων πλοηγών, ανυψωτήρων, προφυλακτήρων για πονπκούς και γεφυρών  .3 χρήσης δεβιστήτων ναυπκής τέχνης, συμπεριλαμβανομένης ορθής χρήσης κόμβων, αμματίσεων και ανασχετήρων  Χρήση και χειρισμός εξοπλισμού και μηχανών καταστρώματος και χειρισμότος και καλύμματα κυτών, ράμπες, πλευρικές θύρες ή ανελκυστήρες πλώρης/ πρύμνης  .2 συστήματα αγωγών - αναρροφήσες και φρεάπαι υδροσυλλεκτών και έρματος  .3 γερανοί, φορτωτήρες, βαρούλκαι  Γνώση έπορσης και υποστολής σημαίων και των κυρίων μεμονομένων σημάτων σημαίας	Αξιολόγηση σταχείων που λαμβάνοντα από πρακτική επίδει ξη	Επίδε ξη των κατάλληλων μεθόδων εξαρπομού και απεξαρπομού σύμφωνα με ασφαλή βιομηχανική πρακτική  Επίδε ξη κατάλληλης δημιουργίας και χρήσης κόμβων, αμματίσεων, ανασχετήρων, φίμωσης σχαινών, περιελίξεων, καθώς επίσης και του κατάλληλου χειρισμού μουσαμά  Επίδε ξη κατάλληλων μεθόδων για χειρισμό σχαινών, καλωδίων, συρματόσχαινων και αλυσίδων
Εφαρμογή επαγγελμα- πκής υγιανής και προ- φυλάξα ς ασφαλείας	(Α, Β, G, Η, Ο, Ρ, Q) Εργασιακή γνώση ασφαλών πρακτικών εργασίας κα προσωπικής ασφάλειας επί πλοίου, συμπερλαμβανομένων:  1 εργασίας σε εκτεθειμένη θέση 2 εργασίας στην πλευρά του πλοίου 3 εργασίας σε κλειστούς χώρους 4 άδειας εργασίας συστημάτων 5 χειρισμού σχαινών 6 τεχνικών ανύψωσης και μεθόδων πρόληψης τραυματισμών στην πλάτη 7 ηλεκτρολογικής ασφάλειας 8 μηχαινικής ασφάλειας και ασφάλειας βιολογικών κινδύνων 10 εξοπλισμού προσωτικής ασφάλειας	Αξιολόγηση αποδεικών σταχείων που λαμβάνο- ντα από ένα ή περισσότε- ρα από τα ακόλουθα:  .1 εγκεκα μένη εμπειρία κατά την υπηρεσία  .2 πρακτική εκπαίδευση  .3 εξέταση  .4 εγκεκα μένη εμπειρία εκπαίδευσης επί πλοίου	Οι διαδικασίες που έχουν σχεδιασθεί για τη προφύλαξη προσωπικού και πλοίου τηρούνται ανά πάσα στι γμή Οι ασφαλείς πρακτικές εργασίας τηρούνται και οι κατάλληλος προστατευτικός εξοπλισμός και εξοπλισμός ασφαλείας χρησιμοπαιούνται πάντοτε με ορθό τρόπο

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκεια	Μέθοδα επίδε ξης ικανότητας	Κατήα α αξιολόγησης της ικανότητας
Εφαρμογή προφυλάξε- ων κα συμβολή στη πρόληψη ρύπανσης του θαλάσσιου περι- βάλλοντος	Γνώση των προφυλάξεων που πρέ- πε να λαμβάνοντα για την πρόληψη της ρύπανσης του θαλάσα ου περ- βάλλοντος Γνώση της χρήσης κα λειτουργίας του εξοπλισμού καταπολέμησης της ρύπανσης Γνώση των εγκεκαμένων μεθόδων για την διάθεση θαλασσίων ρύπων	Αξιολόγηση αποδεκτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 πρακτική εκπαίδευση  .3 εξέταση  .4 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου	Οι διαδικασίες που έχουν σχεδιασθεί για την προστασία του θαλάσσου περβάλλοντος τηρούνται ανά πάσα στι γμή
Λειτουργία σκαφών επιβίωσης κα λέμβων διάσωσης	Γνώση της λειτουργίας σκαφών επι- βίωσης και λέμβων διάσωσης, των συσκευών και διατάξεων καθαίρεσης τους καθώς και του εξοπλίσμού τους Γνώση τεχνικών επιβίωσης στη θά- λασσα	Αφολόγηση αποδεκτικών στα χείων που λαμβάνοντα από εγκεκριμένη εκπαίδευση κα εμπειρία όπως αναφέρετα στο τμήμα Α-VI/2, παράγραφα 1εως 4	Οι ενέργειες για την αντιμετώτη ση εγκαταλείψης πλοίου και καταστά- σες επιβίωσης είναι κατάλληλες για τις επικρατούσες συνθήκες και προϋποθέσεις και συμμορφώνο- ντα με αποδεκτές πρακτικές και πρότυπα ασφαλείας

### Λα τουργεία: Συντήρηση και επισκευή σε επίπεδο στήριξης

Στήλη 1 Ικανότητα	Στήλη 2 Γνώση, κατανόηση κα επάρκε α	Στήλη 3	Στήλη 4
		Μέθοδα επίδειξης ικανότητας	Κα τήα α αξιολόγησης της ι κανότητας
Συμβολή στη συντήρηση και επισκευή επί πλοίου	Ικανότητα χρήσης υλικών και εξο- πλισμού βαφής, λίπανσης και κα- θαρισμού Ικανότηται κατανόησης και εκτέλε- σης συνήθων διαδικασιών συντή- ρησης και επισκευών Γνώση τεχνικών προεταιμασίας ε- πιφάναιας	Αξιολόγηση αποδεικτι- κών στα χείων που λαμβάνονται από πρα- κτική επίδειξη	Οι δραστηριότητες συντήρησης και επισκευής πραγματοττα ούνται σύμφωνα με τεχνικές προδιαγραφές, προδιαγραφές ασφάλειας και διαδικασιών
	Κατανόηση κατευθυντήρων οδη- γών του κατασκευαστή κα οδηγών ασφαλείας επί του πλοίου Γνώση ασφαλούς ἄάθεσης των αποβλήτων Γνώση της εφαρμογής, της συντή- ρησης κα χρήσης χαροκίνητων κα ηλεκτρικών εργαλείων	Αξιολόγηση αποδακτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπαιρία κατά την υπηρεσία .2 πρακτική εκπαίδευση	
		.3 εξέταση .4 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοί- ου	

#### ΚΕΦΑΛΑΙΟ ΙΙΙ

#### Πρότυπα που αφορούν το τμήμα μηχανής

Τμήμα Α - ΙΙΙ/1

Υποχρεωτικές ελάχιστες απαιτήσεις για πιστοποίηση αξιωματικών που είναι υπεύθυνοι φυλακής μηχανοστασίου σε επανδρωμένο μηχανοστάσιο ή μηχανικών καθορισμένων καθηκόντων σε περιοδικά μη επανδρωμένο μηχανοστάσιο

#### Εκπαίδευση

1 Η εκπαίδευση και άσκηση που απαιτούνται από την παράγραφο 2.4 του κανονισμού ΙΙΙ/1 θα περιλαμβάνουν εκπαίδευση σε δεβότητες μηχανολογικού και ηλεκτρολογικού εργαστηρίου που είναι σχετικές με τα καθήκοντα αξιωματικού μηχανής.

#### Εκπαίδευση σε πλοίο

- 2 Κάθε υποψήφιος για πιστοποίηση ως αξιωματικός υπεύθυνος φυλακής μηχανοστασίου ή ως μηχανικός καθορισμένων καθηκόντων σε περιοδικά μη επανδρωμένο μηχανοστάσιο πλοίων που διαθέτουν κύρια μηχανή πρόωσης ισχύος 750 ΚW ή άνω, του οποίου η θαλάσσια υπηρεσία σύμφωνα με την παράγραφο 2.2 του κανονισμού ΙΙΙ/1, αποτελεί τμήμα εγκεκριμένου προγράμματος εκπαίδευσης, ανταποκρινόμενο στις απαιτήσεις αυτού του τμήματος, θα ακολουθήσει ένα εγκεκριμένο πρόγραμμα εκπαίδευσης σε πλοίο, το οποίο:
  - .1 εξασφαλίζει ότι κατά την απαιτούμενη περίοδο θαλάσσιας υπηρεσίας, ο υποψήφιος λαμβάνει συστηματική πρακτική εκπαίδευση και εμπειρία στις εργασίες, καθήκοντα και ευθύνες αξιωματικού που είναι υπεύθυνος φυλακής μηχανοστασίου, λαμβάνοντας υπόψη τις οδηγίες που παρατίθενται στο τμήμα Β-ΙΙΙ/1 αυτού του Κώδικα,
  - .2 επιτηρείται στενά και παρακολουθείται από προσοντούχο και κάτοχο πιστοποιητικού αξιωματικό μηχανής σε πλοία στα οποία πραγματοπαιείται η εγκεκριμένη θαλάσσια υπηρεσία, και
  - .3 είναι επαρκώς συμπληρωμένο το βιβλίο εγγραφών εκπαίδευσης.

#### Πρότυπο Ικανότητας

- 3 Κάθε υποψήφιος για πιστοποίηση ως αξωματικός υπεύθυνος φυλακής μηχανοστασίου σε επανδρωμένο μηχανοστάσιο ή ως μηχανικός καθορισμένων καθηκόντων σε περιοδικά μη επανδρωμένο μηχανοστάσιο σε ποντοπόρο πλοίο του οποίου η ισχύς της κύριας μηχανής πρόωσης είναι 750 KW ή άνω, θα απαιτείται να επιδείξει ικανότητα ανάληψης σε επιχειρησιακό επίπεδο, των εργασιών, καθηκόντων και ευθυνών που παρατίθενται στην στήλη 1 του πίνακα Α-ΙΙΙ/1.
- 4 Η ελάχιστη γνώση, κατανόηση και επάρκεια που απαιτείται για πιστοποίηση παρατίθενται στην στήλη 2 του πίνακα-Α-ΙΙΙ/1.
- 5 Το επίπεδο γνώσης της ύλης που παρατίθεται στην στήλη 2 του πίνακα Α-ΙΙΙ/1 θα είναι επαρκής για τους αξιωματικούς μηχανής για να εκτελούν τα καθήκοντα τήρησης φυλακής\*.
- 6 Η εκπαίδευση και εμπειρία για να επιτευχθεί το απαραίτητο επίπεδο θεωρητικών γνώσεων κατανόησης και επάρκειας θα βασίζονται στο τμήμα Α-VIII/2 μέρος 4-2 Αρχές που πρέπει να τηρούνται κατά την τήρηση φυλακής μηχανοστασίου, και θα λαμβάνουν υπόψη τις σχετικές απαιτήσεις αυτού του μέρους και τις οδηγίες που δίνονται στο μέρος Β αυτού του Κώδικα.
- 7 Υποψήφια για πιστοποίηση για υπηρεσία σε πλοία στα οποία αι ατμολέβητες δεν αποτελούν μέρος της μηχανολογικής τους εγκατάστασης, μπορούν να παραλείπουν τις σχετικές απαιτήσεις του πίνακα Α-ΙΙΙ/1. Πιστοποιητικό που απονέμεται κατ'αυτό το τρόπο δεν θα ισχύει για υπηρεσία σε πλοία στα οποία ατμολέβητες αποτελούν μέρος της μηχανολογικής εγκατάστασης του πλοίου έως ότου ο αξιωματικός μηχανής ανταποκρίνεται στο πρότυπο ικανότητας στα στοιχεία του πίνακα Α -ΙΙΙ/1 που παραλείπονται. Οπαιοσδήποτε τέταιος περιορισμός, θα αναφέρεται στο πιστοποιητικό και τη θεώρηση.
- 8 Η Διοίκηση μπορεί να παραλείπει απαιτήσεις γνώσης για τύπους μηχανών πρόωσης πλην εκείνων των μηχανολογικών εγκαταστάσεων για τις οποίες θα ισχύει το πιστοπαιητικό που θα χορηγείται. Πιστοπαιητικό

<sup>\*</sup> Ο σχετικές πρότυπες σαρές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταμασία των εκταιδεύσεων

που χορηγείται σ' αυτή τη βάση, δεν θα ισχύει για οπααδήποτε κατηγορία μηχανολογικής εγκατάστασης που έχει παραλειφθεί έως ότου αξιωματικός μηχανής αποδειχθεί ικανός σ' αυτές τις απαιτήσεις γνώσης. Οπαιοσδήποτε τέταιος περιορισμός θα αναφέρεται στο πιστοπαιητικό και τη θεώρηση.

9 Κάθε υποψήφιος για πιστοποίηση απαιτείται να προσκομίσει αποδεικτικά σταιχεία από τα οποία θα προκύπτουν ότι έχει επιτύχει το απαιτούμενο πρότυπο ικανότητας σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που παρατίθενται στις στήλες 3 και 4 του πίνακα Α-ΙΙΙ/1.

#### Παράκτια πλόες

10 Οι απαιτήσεις των παραγράφων 2.2 έως 2.5 του κανονισμού III/1 που αφορούν το επίπεδο γνώσης, κατανόησης και επάρκειας που απαιτείται από τα διάφορα τμήματα που παρατίθενται στη στήλη 2 του πίνακα Α-ΙΙΙ/1, μπορεί να πακίλουν για αξιωματικούς μηχανής πλοίων, η ισχύς της μηχανής πρόωσης είναι κάτω των 3.000 kW και εκτελούν παράκπους πλόες, όπως θεωρείται απαραίτητο, έχοντας υπ' όψη τις επιπτώσεις στην ασφάλεια όλων των πλοίων που μπορεί να δραστηριοπικούνται στα ίδια ύδατα. Οπαιοσδήποτε τέταιος περιορισμός θα αναφέρεται στο πιστοπιαιητικό και τη θεώρηση.

#### Πίνακας Α-ΙΙΙ/1

Προἄ αγραφή ελάχι στου προτύπου ι κανότητας για αξιωματικούς που είναι υπεύθυνα φυλακής μηχανής σε επανδρωμένο μηχανοστάσιο ή μηχανικούς καθορισμένων καθηκόντων σε περιοἄ κά μη επανδρωμένο μηχανοστάσιο

Λα τουργία: Ναυτική μηχανολογία σε επιχαιρησιακό επίπεδο

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκα α	Μέθοδα επίδα ξης ικανότητας	Κατήα α αξιολόγησης της ικανότητας
Γήρηση ασφαλούς φυ- λακής μηχανοστασίου	Λεπτομερής γνώση των Αρχών που πρέπε να τηρούντα κατά την τήρηση φυλακής μηχανοστασίου που περιλομβάνουν:  1 καθήκοντα που είνα σχεπκά με την ανάληψη και αποδοχή φυλακής 2 συνήθη καθήκοντα που αναλαμβάνοντα κατά την διάρκεια φυλακής 3 τήρηση ημερολογίων μηχανοστασίου και η σημασία των μετρήσεων που λαμβάνοντα  4 καθήκοντα που είναι σχεπκά με την παράδοση φυλακής Διαδικασίες ασφάλειας και έκτακτης ανάγκης, αλλαγή όλων των αυστημάτων από τηλε-έλεγχοι αυτόματο σε τοπικό έλεγχο  Προληπικά μέτρα ασφάλειας που πρέπει ναι τηρούνται στη διάρκεια φυλακής και άμεσες ενέργειες που πρέπει ναι γίνονται σε περίπτωση πυρκαγιάς ή ατυχήματος μετίδι αίτερη αναφορά σται συστήματα πετρελαίου  Διαχείριση πόρων μηχανοστασίου  Γνώση αρχών διαχείρισης πόρων μηχανοστασίου, συμπεριλαμβανομένου:  1 της κατανομής, εκχώρησης και τεράρχησης των πόρων 2 της αποτελεσματής επικανωνίας 3 του δυναμισμού και της ηγεσίας 4 της απόκτησης και διατήρησης επίγνωσης της κατάστασης 5 της εκτίμησης ομαδικής εμπειρίας	Αξολόγηση αποδεκτικών στα χείων που λαμβάνοντα από ένα ή περασότερα από τα ακόλουθα:  1 εγκεκριμένη εμπερία κατά την υπηρεσία  2 εγκεκριμένη εκπαίδευση σε προσομαωτή, όπου απα τείτα  4 εγκεκριμένη εκπαίδευση σε εξοπλαμά εργαστηρίου  Αξολόγηση αποδεκτικών στα χείων που λαμβάνοντα από ένα ή περασότερα από τα ακόλουθα:  1 εγκεκριμένη εκπαίδευση  2 εγκεκριμένη εκπαίδευση  3 εγκεκριμένη εκπαίδευση  3 εγκεκριμένη εκπαίδευση  3 εγκεκριμένη εκπαίδευση	Η ἄεξαγωγή, παράδοση κα ανηκατάσταση φυλακής συμμορφώνετα με αποδεκτές αρχές κα ἄαἄκασίες  Η συχνότητα κα έκταση παρακολούθησης του μηχανολογικού εξοπλαμού κα συστημάτων συμμορφώνετα με τις αυστάσες του κατασκευαστή κα τις αποδεκτές αρχές κα ᾶαἄκασίες περιλαμβανομένων των Αρχών που πρέπε να τηρούντα κατά την τήρηση φυλακής μηχανοστασίου  Τηρείτα σωστή καταγραφή των κυήσεων κα δραστηριοτήτων που αφορούν τα μηχανολογικά συστήματα του πλοίου  Η επικανωνία δίνετα κα λαμβάνετα με σαφή κα α αξιαμφιαβήτητο τρόπο  Αμφισβητήσιμες αποφάσεις και ή ενέργεις έχουν ως αποτέλεσμα τη κατάλληλη πρόκληση και ανταπόκριση  Αναγνωρίζοντα αποτελεσματικές ηγετικές συμπεριφορές  Μέλος(η) της ομάδας μα ράζοντα ακριβή κατανόηση της υφιστάμενη και της αναμενόμενης κατάστασης
Χρήση Αγγλικής γλώσ- σας σε γραπτή και προ- φορική μορφή	Επαρκής γνώση της Αγγλικής γλώσσας για να είναι σε θέση ο αξιωμοιικός νός να χρησιμοπα εί μηχανολογικές εκδόσας και να εκτελεί τα καθήκοντά του ως μηχανικός	Εξέταση και αξιολόγηση αποδεκτικών στα χείων που λαμβάνονται από πρακτικές οδηγίες	μηχανοστασίου και συναφών συστημάτων καθώς και του εξωτερικό περιβάλλοντος Εκδόσεις αγγλικής γλώσσας συναφείς με καθήκοντα μηχανής ερμηνεύονται με ορθό τρόπο Οι επικανωνίες είναι σαφείς και κατανοητές

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ι κανότητας	Κατήα α αξιολόγησης της ικανότητας
Χρήση συστημάτων εσωτερικής επικα νωνίας	Λειτουργία όλων των συστημάτων εσωτερικής επικανωνίας επί τελοίου	Εξέταση και αφολόγηση αποδακτικών στα χείων που λαμβάνονται από έναι ή περισσότερα από ται ακόλουθα:  .1 εγκεκριμένη εμπαιρίαι κατά την υπηρεσία  .2 εγκεκριμένη εμπαιρίαι εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομαιωτή, όπου απαιτείται  .4 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου	Η εκπομπή και λήψη μηνυμάτων είναι σταθερά επιτυχείς Τα αρχεία επικα νωνίας είναι πλήρη, ακαβή και συμμορφώνοντα πλήρως με τις θεσμικές απαιτήσας
Λετουργία κύριων και βοηθητικών μηχανών και συναφών συστημάτων ελέγχου	Βασικές αρχές κατασκευής και λειτουργίας μηχανικών συστημάτων, που περιλαμβάνουν: .1 ναυπικές μηχανές diesel	Εξέταση και αξιολόγηση αποδεικτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα;	Ο μηχανισμοί κατασκευής και λει τουργίας μπορούν να κατα- νοούντα και να εξηγούνται με σχέδια/ οδηγίες
	.2 ναυτικοί ατμοστρόβιλα	.1 εγκεκριμένη εμποιρία κατά την υπηρεσία	
	.3 ναυπκοί αεριοστρόβιλα .4 ναυπκοί λέβητες	.2 εγκεκα μένη εμπα ρία εκπαίδευσης επί πλοίου	
	.5 εγκαταστάσεις άξονα περιλαμβα- νομένης της έλικας	.3 εγκεκα μένη εκπαίδευση εξοπλισμού εργαστηρίου	
	.6 άλλα βοηθητικά, όπως διάφορες αντλίες, αεροσυμτιεστή, καθαριστή- ρα, γεννήτρια γλυκού νερού, θερμικό εναλλάκτη και συστήματα ψύξης, κλιματισμού και αερισμού		
•	.7 μηχανισμό πηδαλιουχίας		 
	.8-αυτόματα συστήματα ελέγχου		
	9 ροή υγρών και χαρακτήριστικά Μπαντικού πετρελαίου, καύσιμου πετρελαίου και συστήματα ψύξης		
	.10 μηχανήματα καταστρώματος		
,	Διαδικασίες ασφαλείας και έκτακτης ανάγκης για τη λατουργία των μηχα- νών της εγκατάστασης πρόωσης, περιλαμβανομένων συστημάτων ελέγχου		
	Προεταμασία, λειτουργία, ανίχνευση βλαβών και απαραίτητα μέτρα για την πρόληψη ζημίας για τα ακόλουθα στα χεία μηχανών και συστημάτων ελέγχου:	Αξιολόγηση αποδεικτιών αταχείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:	Ο εργασίες σχεδιάζονται και εκτε- λούνται σύμφωνα με τα εγχειρίδα λειτουργίας, θεσπισμένους κανό- νες και διαδικασίες για να εξα- σφαλίζεται η ασφάλεια των εργα-
	.1 κύριες μηχανές και συναφή βοηθη- τικά	1 εγκεκριμένη εμπαιρία κατά την υπηρεσία	σιών ώστε να αποφευχθεί η ρύ- πανση του θαλάσσιου περιβάλλο- ντος
	.2 ατμολέβητες και συναφή βοηθηπ- κά και συστήματα ατμού	.2 εγκεκρ μένη εμπο ρία εκποίδευσης επί πλοίου	

Στήλη 1 Ικανότητα	Στήλη 2 Γνώση, κατανόηση και επάρκει α	Στήλη 3 Μέθοδα επίδει ξης ι κανότητας	Στήλη 4 Κα τήα α αξιολόγησης της ικανότητας
Λειτουργία κύριων κα βοηθητικών μηχανών κα συναφών συστημάτων ελέγχου (συνέχεια)	.3 βοηθηπκές ωνητήριες δυνάμεις και συναφή συστήματα .4 άλλα βοηθηπκά, συμπεριλαμβα- νομένου συστήματα ψύξης, κλιμαπ- σμού και αερισμού	.3 εγκεκα μένη εκπαίδευση σε προσομαωτή, όπου απα τείτα .4 εγκεκα μένη εκπαίδευση σε εξοπλισμό εργαστηρίου	Παρεκκλίσες από το πρότυπο αναγνωρίζοντα γρήγορα Η απόδοση μηχανικών εγκαταστάσεων κα συστημάτων πληροί με συνέπεια τις απαιτήσεις, περλαμβανομένων εντολών γεφέρας που αφορούν μεταβολές ταχύτητας και κατεύθυνσης Ο απίες μηχανικών δυσλειτουργών αναγνωρίζονται γρήγορα και εχεαφάλιση της συνολικής αφάλειας του πλοίου και της εγκατάστασης, λαμβανομένων υπόψη των συνθηκών και καταστάσεων που επικρατούν
Λειτουργία συστημάτων καυσίμου, λίπανσης, έρματος και άλλων συστημάτων άντλησης και συναφών συστημάτων ελέγχου	Λατουργκά χαρακτηματικά αντλών κα συστημάτων σωληνώσεων, συμπερλαμβανομένου συστημάτων ελέγχου Λατουργία συστημάτων άντλησης .1 συνήθας εργασίες άντλησης .2 λατουργία συστημάτων υδροσυλλεκτών, έρματος και άντλησης φορτίου Απαιτήσας και λατουργία διαχωρσών ελαίου-ύδατος (ή παρόμα ου εξοπλισμού)	Εξέταση κα αξιολόγηση αποδεικτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  1 εγκεκριμένη εμπειρία κατά την υπηρεσία  2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου.  3 εγκεκριμένη εκπαίδευση σε προσομα ωτή, όπου απα τείτα  4 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου	Οι εργασίες σχεδιάζονται και εκτε- λούνται σύμφωνα με ται εγχαρίδια λειτουργίας, θεσπισμένους κανό- νες και διαδικασίες για να εξα- αποφεύγεται ρύπανση του θα- λάσαιου περιβάλλοντος Παρεκκλίσεις από το πρότυπο αναγνωρίζονται γρήγορα και λαμ- βάνονται κατάλληλα μέτρα

# Λειτουργία: Μηχανολογία Ηλεκτρική, Ηλεκτρονική και συστημάτων ελέγχου σε επιχειρησιακό επίπεδο

Στήλ <del>η</del> 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκα α	Μέθοδα επίδα ξης ι κανότητας	Κριτήρια αξιολόγησης της ικανότητας
Χε ρ σμός ηλεκτρολογ - κών, ηλεκτρον κών κα συστημάτων ελέγχου	Βασικός σχεδιασμός και αρχές λειτουργίας του ακόλουθου ηλεκτρολογικού, ηλεκτρονικού και εξοπλισμού ελέγχου:  .1 ηλεκτρολογικός εξοπλισμός: .α γεννήτρια και συστήματα διανομής .β προεταιμασία, εκκίνηση παράλληλη σύνδεση και εναλλαγή γεννητριών .γ ηλεκτρικές μηχανές συμπεριλαμβανομένων μεθοδολογίες εκκίνησης	Εξέταση και αξολόγηση αποδακτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπαιρία κατά την υπηρεσία  .2 εγκεκριμένη εμπαιρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση στι προσομαιωτή, όπου απαιτείτα  .4 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου	Οι εργασίες προγραμματίζοντα κα εκτελούντα σύμφωνα με τα εγχειρίδια λειτουργίας, καθ ερωμένους κανόνες και διαδικασίες για να εξασφαλίζεται η ασφάλεια των εργασιών  Ηλεκτρολογικά, ηλεκτρονικά κα συστήματα ελέγχου μπορούν να γίνονται με σχέδια/ οδηγίες

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα ε- πάρκε α	Μέθοδα επίδα - ξηςι κανότητας	Κα τήα α αξιολόγησης της ικανότητας
Χα α σμός ηλεκτρολογικών, ηλεκτρονικών κα συστημάτων ελέγχου (συνέχεια)	δ εγκαταστάσες υψηλής τάσης  ε κυκλώματα ακολουθιακού ελέγχου και συσκευές συναφών συσημάτων  2 ηλεκτρονικός εξοπλισμός:  α χαρακτηριστικά βαισικών στα χείων ηλεκτρονικού κυκλώματος  β ἄάγραμμα λειτουργίας για αυτόματα συστήματα και συστήματα και συστήματα ελέγχου  για μηχανικά στα χεία, συμπτεριουργίας της κύριας εγκατάτουργίας της κύριας εγκατάματων ελέγχων ατμολέβητα  3 συστήματα ελέγχου:  α ἄάφορες μεθοδολογίες και χαρακτηριστικά αυτόματου ελέγχου  β χαρακτηριστικά Αναλογικού - Ολο-		
Συντήρηση και επισκευή ηλεκτρολογικού και ήλε- κτρονικού εξοπλισμού	κληρωπκού - Διαφορικού (PID) ελέγχου και συσκευές συνδεδεμένων συστημάτων για έλεγχο διεργασίω στα ηλεκτρολογικά συστήματα επί του πλοίου, συμπεριλαμβανομένης της ασφαλούς απομόνωσης ηλεκτρολογικό εξοπλισμού, που απα τούνια πριν επιτραπεί στο προσωπικό να εργαστεί σε τέτα ο εξοπλισμού ηλεκτολογικού συστήματας, πινάκων διακοπτών, ηλεκτρικών μηχανών, γεννήτριας και ηλεκτρικά συστήματα και εξοπλισμός DC Εντοπισμός ηλεκτρικών δυσλα τουργών, περιοχής βλαβών και μέτρα πρόληψης ζημιών Κατασκευή και λα τουργία ηλεκτρικού εξοπλισμού δοια μών και μετρήσεων Δοιαμές λα τουργίας και απάδοσης του εξής εξοπλισμού και του σχεδιασμού τους:  1 συστήματα παρακολούθησης 2 αυτόματες συσκευές ελέγχου 3 συσκευές προστασίας Ερμηνεία ηλεκτρικών και σπλών ηλεκτρονικών διαγραμμάτων	Εξέταση και αφολόγηση αποδεκτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα;  .1 εγκεκρ μένη εκπαίδευ-ση δεφοτήτων εργαστηρίου  .2 εγκεκρ μένη πρακτική εμπερία και εξετάσες  .3 εγκεκρ μένη εμπερία κατά την υπηρεσία  .4 εγκεκρ μένη εμπερία εκπαίδευσης επί πλοίου	Τα μέτρα ασφαλείας για την εργασία είναι κατάλληλα Η επλογή και χρήση εργαλείων χαιρός, οργάνων μέτρησης και εξοπλομού δοκιμών είναι κατάλληλη και η ερμηνεία αποτελεσμάτων είναι ακιμβής Η αποσυναρμολόγηση, έλεγχος, επισκευή και επανασυναρμολόγηση εξοπλισμού είναι σύμφωνες με τα εγχαιρίδια και την καλή πρακική Η επανανασυναρμολόγηση και δοκιμή απόδοσης είναι σύμφωνες με τα εγχαιρίδια και την καλή πρακική

# Λειτουργία: Συντήρηση και επισκευή σε επιχειρησιακό επίπεδο

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4	
Ικανότητα	Γνώση, κατανόηση κα ε- πάρκει α	Μέθοδα επίδα- ξηςι κανότητας	Κα τήρια αξιολόγησης της ι κανότητας	
Κατάλληλη χρήση εργα- λείων χα ρός, μηχανικών εργαλείων κα οργάνων μέτρησης για κατασκευή κα επισκευή επί του πλοίου	Χαρακτηριστικά και περιορισμοί υλικών που χρησιμοπαιούνται στη κατασκευή και επισκευή πλοίου και εξοπλισμού Χαρακτηριστικά και περιορισμοί διεργαιών που χρησιμοπαιούνται για κατασκευή και επισκευή Ιδιότητες και παράμετρα που εξετάζονται στη κατασκευή και επισκευή συστημάτων και συστατικών στα χείσων Μέθοδαι για εκτέλεση ασφαλών επισκευών έκτακτης ανάγκης / προσωρινών επισκευών Μέτρα ασφαλείας να λαμβάνονται για την εξασφάλιση ασφαλούς εργασιακού περιβάλλοντος και για τη χρήση εργαλείων χαιρός, μηχανικών εργαλείων και οργάνων μέτρησης	Εξέταση και αφολόγηση που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  1 εγκεκριμένη εκπαίδευση δεφοτήτων εργαστηρίου  2 εγκεκριμένη πρακτική εμπειρία και εξετάσεις  3 εγκεκριμένη εμπειρία καιά την υπηρεσία  4 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου	Η αναγνώα ση σημαντικών παραμέτρων για την κατασκευή συνήθων αταχείων συναφών με το πλοίο είναι κατάλληλη Η επιλογή υλικών είναι κατάλληλη Η κατασκευή είναι εντός των ανοχών σχεδιασμού Χρήση εξοπλισμού και εργαλείων και οργάνων μέτρησης είναι κατάλληλη και ασφαλής	
Συντήρηση και επισκευή μηχανών και εξοπλισμού του πλοίου	Χρήση διαφόρων τύπων στεγανοπα- ητικών και υλικών γόμωσης  Μέτρα ασφαλείας που πρέπει να λαμβάνονται για επίσκευή και συντή- ρηση, συμπεριλαμβανομένης της ασφαλούς απομόνωσης επί του πλοίου εξοπλισμού, και μηχανών που απαιτούνται παν επιτραπεί στο προσωτικό να εργαστεί σε τέτα ο	Εξέταση και αξιολόγηση αποδεικτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:	Οι ακολουθούμενες διαδικασίες ασφαλείας είναι κατάλληλες Η επιλογή εργαλείων και εφεδρικού εξοπλισμού είναι κατάλληλη	
-	εξοπλισμό ή μηχανές Κατάλληλες βασικές μηχανικές γνώσες και δεξιότητες Συντήρηση και επισκευή, όπως αποσυναρμολόγηση, ρύθμιση και επισνασυναρμολόγηση μηχανών και εξοπλισμού Χρήση κατάλληλων ει δικών εργαλείων και οργάνων μετρησης	ση δεξιοτήτων εργαστη- ρίου  .2 εγκεκριμένη πρακτική  εμπειρία και εξετάσεις  .3 εγκεκριμένη εμπειρία  κατά την υπηρεσία  .4 εγκεκριμένη εμπειρία  εκπαίδευσης επί πλοίου	Η αποσυναρμολόγηση, έλεγχος, επσκευή και επανασυναρμολόγηση εξοπλισμού είναι σύμφωνη με τα εγχειρίδια και την καλή πρακτική Η εκ νέου θέση σε λειτουργία και η δοικιμή απόδοσης είναι σύμφωνη μ	
	Χαρακτηριστικά σχεδιασμού και επιλογή υλικών στη κατασκευή εξοπλισμού Ερμηνεία σχεδίων μηχανών και εγιχαιριδίων Ερμηνεία διαγραμμάτων σωληνώσεων, υδραυλικών καθώς και διαγραμμάτων πεπιεσμένου αέρα		Η επιλογή των υλικών και των μερών είναι κατάλληλη	

# Λα τουργία: Έλεγχος της λα τουργίας του πλοίου και μέρι μνα επι βα νόντων σε επι χα ρησιακό επίπεδο

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκει α	Μέθοδα επί- δε ξηςι κανότητας	Κριτήρια αξιολόγησης της ικανότητας
Εξασφάλιση συμμόρ- φωσης με τις απατήσεις πρόληψης ρύπανσης	Πρόληψη ρύπανσης του θαλάσσιου περιβάλλοντος Γνώση των προληπτικών μέτρων που πρέπε να λαμβάνοντα για να προληπεκών θαλάσσιου περιβάλλοντος Αντιρρυπαντικές διαδικασίες και όλος ο σχετικός εξοπλισμός Σημασία προληπτικών μέτρων για την προστασία του θαλασσίου περιβάλλοντος	Εξέταση και αφολόγηση αποδεικτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση	Ο δαδκασίες παρακολούθησης εργασιών στο πλοίο και εξασφάλσης στο πλοίο και εξασφάλσης στο μυρόρφωσης με τις απαιτήσες ΜΑRPOL τηρούνται πλήρως Ενέργειες για να εξασφαλίζεται η δατήρηση περιβαλλοντικού προτύπου
Διατήρηση αξιοπλοίας πλοίου.	Ευστάθεια πλοίου Εργασιακή γνώση και εφαρμογή τηνάκων ευστάθειας, διαγωγής και τάσεων, διαγραμμάτων και εξοπλισμού υπολογισμού τάσεων Κατανόηση των αρχών υδατοστεγούς ακεραότητας Κατανόηση των βασικών ενεργειών που πρέπει να λαμβάνονται σε περίπτωση μερικής απώλειας ακέραι ης πλευστότητας Κατασκευή πλοίου Γενική γνώση των κυρίων κατασκευσοπικών μελών πλοίου και ορθών ονομάτων των διαφόρων μερών	Εξέταση κα αξιολόγηση αποδεκτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομα ωτή, όπου απαιτείτα  .4 εγκεκριμένη εκπαίδευση εξοπλιμού εργαστηρίου	Οι συνθήκες ευστάθειας συμμορφώνοντα με τα κρτήρια ακέρα ης ευστάθειας του ΙΜΟ κάτω από όλες τις συνθήκες φόρτωσης Οι ενέργειες για να εξασφαλιστεί κα να διατηρηθεί ηυδατοστεγής ακερα ότητα του πλοίου συμορφώνοντα με την αποδεκτή πρακτική
Πρόληψη, έλεγχος πυρ- καγιάς και πυρόσβεση σε πλοίο.	Συσκευές πρόληψης πυρκαγιάς και πυρόσβεσης Ικανότητα οργάνωσης γυμνασίων πυρκαγιάς Γνώση κλάσης και χημείας της φωτιάς Γνώση συστημάτων πυρόσβεσης Μέτρα που πρέπει να λαμβάνονται σε περίπτωση πυρκαγιάς, συμπερίλαμβανομένων πυρκαγιών που αφορούν συστήματα πετρελαίου	Αφολόγηση αποδεικη- κών στα χείων που λαμβάνοντα από εγκε- κα μένη εκπαίδευση κα εμπειρία πυρόσβεσης όπως καθορίζονται στο τμήμα Α-VI/3, παρά- γραφα 1 έως 3	Ο τύπος κα η κλίμακα του προβλήματος αναγνωρίζοντα έγκα ρα κα α α αρχικές ενέργαες είναι σύμφωνες με τη διαδικασία έκτακτης ανάγκης κα τα σχέδια ανάγκης για το πλοίο  Εκκένωση, διακοπή λει τουργίας ανάγκης κα διαδικασίες απομόνωσης είναι κατάλληλες για την φύση του επείγοντος και πραγματοπασύνται γρήγορα  Η σαρά προτεραιότητας και τα επίπεδα και χρονικά όρια αναφορών και ενημέρωσης προσωπικού επί του πλοίου είναι σχετικά με τη φύση της έκτακτης ανάγκης και αντανακλούν το επείγον του προβλήματος

[κανότητα			
	Γνώση, κατανόηση και ε- πάρκει α	Μέθοδα επί- δε ξηςικανότη- τας	Κα τήα α αξιολόγησης της ι κανότητας
Χερ σμός σωσπκών συσκευών	Διάσωση  Ικανότητα οργάνωσης γυμνασίων εγ- κατάλειψης πλοίου και γνώση της λειτουργίας των σκαφών επιβίωσης και λέμβων ἄ άσωσης, των συσκευών και ρυθμίσεων καθαίρεσής τους, και του εξοπλισμού τους, συμπερ- λαμβανομένων ραδιοσυσκευών διά- σωσης, δορυφορικών ΕΡΙΚΒs, SARTs στολών εμβάτππισης και βοηθημάτων θερμικής προστασίας	Αξολόγηση στα χείων που λαμβάνονται από εγκεκα μένη εκπαίδευση κα εμπαρία όπως καθορίζονται στο τμήμα Α-VI/2 παράγραφα 1 έως 4	Οι ενέργεες σε ανταπόκριση εγκατά- λειψης πλοίου και καταστάσεις επιβί- ωσης είναι κατάλληλες για τις επικρα- τούσες συνθήκες και καταστάσεις και συμμορφώνονται με αποδεκτές πρα- κτικές και πρότυπα, ασφαλείας
Εφαρμογή ιστα κών πρώτων βοηθειών επί πλοίου	Ιατρική βοήθεια Πρακτική εφαρμογή των ιστακών ο- δηγών και συμβουλών που λαμβάνο- νται μέσω ασυρμότου, συμπερλαμ- βανομένης της ικανότητας λήψης απο- τελεσματικών μέτρων που βασίζονται σε τέτα α γνώση σε περίπτωση ατυχη- μάτων ή ασθενειών που είναι πιθα νόν  να συμβούν επί πλοίου	Αφολόγηση σταχείων που λαμβάνονται από εγκεκαμένη εκπαίδευ- αη όπως καθορίζεται στο τμήμα Α-VI/4 πα- ράγραφα 1 έως 3	Η αναγνώριση πιθανού αιτίου, φύσης και έκτασης τραυμαπισμών ή συνθηκών είναι ταχεία και η θερατιεία ελαχιστοπαιεί την άμεση απαλή για τη ζωή
Παρακολούθηση συμ- μόρφωσης με νομοθε- πκές απαπήσεις	Βασική εργασιακή γνώση των σχεπ- κών συμβάσεων ΙΜΟ που αφορούν στην ασφάλεια της ζωής στη θάλασσα, στην ασφάλεια (security) και στην προστασία του θαλασσίου περιβάλλο- ντος	Αξιολόγηση άποδεκτι- κών στα χείων που λαμβάνονται από εξε- τάσες ή εγκεκα μένη εκπαίδευση	Οι νομ οθετκές απα τήσεις που σχετί- ζοντα με την ασφάλεια της ζωής στη θάλασσα, την ασφάλεια (security) και την προστασία του θαλάσα ου πεμ- βάλλοντος αναγνωρίζονται σωστά
Εφαρμογή δεξιοτήτων ηγεσίας και ομαδικής εργασίας	Εργασιακή γνώση διαχεία σης κα εκπαίδευσης προσωπικού επί πλοίου Γνώση σχετικών διεθνών ναυτιλιακών συμβάσεων και συστάσεων και εθνικής νομοθεσίας Ικανότητα εφαρμογής διαχεία σης καθηκόντων και φόρτου εργασίας συμπεριλαμβάνομένου:	Αξιολόγηση αποδεικτι- κών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκα μένη εκπαί- δευση  .2 εγκεκα μένη εμπει ρία κατά την υπηρεσία  .3 πρακτική επίδειξη	Το πλήρωμα έχει κατανεμημένα καθήκοντα και είναι ενημερωμένο για τα αναμενόμενα πρότυπα εργασίας και συμπεριφοράς κατά τρόπο κατάλληλο για τα ενδιαφερόμενα άτομα  Ο εκπαιδευτικοί στόχαι και δραστηρότητες βασίζονται στην αξιολόγηση της τρέχουσας κανότητας και των δυνατοτήτων και τις λειτουργικές απαιτήσες  Ο λειτουργίες δεικνύονται σύμφωνες
	.2 ανάθεση καθηκόντων προσωπικού .3 περιορισμούς χρόνου και πόρων .4 καθορισμό προτερα οτήτων		με τους ισχύοντες κανόνες
	Ενώση και ικανότητα εφαρμογής αποτελεσματικής διαχείρισης πόρων:  .1 κατανομή, ανάθεση και καθορισμός προτεραιοτήτων πόρων		Οι εργασίες σχεᾶάζονται και αι πόρο άατίθενται όπως απαιτείται με ορθή προτεραιότητα για την εκτέλεση των άαφόρων εργασιών Η επικανωνία δίνεται και λαμβάνεται
	.2 αποτελεσμαπκή επικανωνία στο πλοίου και στην ξηρά .3 α αποφάσεις αντανακλούν την μελέτη εμπειριών της ομάδας		με σαφή και αδιαμφισβητητο τρόπο Δεικνύονται αποτελεσματικές συμπε αφορές ηγεσίας Ακαβής κατανόηση από τα απαραίτ
	.4 δυναμισμός και ηγεσία συμπερ- λαμβανομένης της παροχής εινήτρου .5 απόκτηση και τήρηση επίγνωσης		τα μέλη της ομάδας της υφιστάμενη και προβλεπόμενης κατάστασης του πλοίου και του εξωτερικού περιβάλλ

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκει α	Μέθοδα επίδα - ξης ι κανότητας	Κριτήρια αξιολόγησης της ι κανότητας
Εφαρμογή δεξιοτήτων ηγεσίας και ομαδικής εργασίας (συνέχεια)	Γνώση και ικανότητα εφαρμογής αποτελεσματικής διαχείρισης πόρων:  1 κατανομή, ανάθεση και καθορσμός προτερα στήτων πόρων  2 αποτελεσματική επικανωνία στο πλοίου και στην ξηρά  3 αι αποφάσας αντανακλούν την μελέτη εμπαιρών της ομάδας  4 δυναμισμός και ηγεσία συμπερλαμβανομένης της παροχής κινήτρου  5 απόκτηση και τήρηση επίγνωσης της κατάστασης  Γνώση και τκανότητα εφαρμογής τεχνικών λήψης αποφάσεων:  1 αξιολόγηση κατάστασης και κινδύνου  2 προσά ορισμός και εξέταση των επιλογών που πρικύπτουν  3 επιλογή σχεδίου δράσης  4 αξιολόγηση αποτελεσματικότητας έκβασης		Ο αποφάσεις είναι α αποτελεσμα- πκότερες για την κατάσταση
Συμβολή στην ασφάλεια προσωπικού και πλοίου	Γνώση τεχνικών προσωπικής επιβίωσης Γνώση πρόληψης και εκανότητα καταπολέμησης πυρκαγιάς και πυρόσβεσης Γνώση στα χειωδών πρώτων βοηθεών Γνώση προσωπικής ασφάλειας και κανωνικών ευθυνών	Αφολόγηση αποδεκτικών στα χείων που λαμβάνο- ντα από εγκεκα μένη εκπαίδευση κα εμπερία όπως καθορίζοντα στην Α-VI/1, παράγραφος 2	Ο κατάλληλος προσταττευτικός εξοπλισμός και εξοπλισμός ασφαλείας χρησιμοπαιούνται σωστά Ο διαδικαισίες και ασφαλείς εργασιακές πρακτικές που έχουν σχεδιασθεί για την προστασία του προσωπικού και του πλοίου τηρούνται πάντοτε Ο διαδικαισίες που έχουν σχεδιασθεί για τη διαφύλαξη του περιβάλλοντος τηρούνται πάντοτε Ο αρχικές και ακόλουθες ενέργειες για την απόκτηση επίγνωσης κατάστασης ανάγκης συμμορφώνονται με θεσπισμένες διαδικαισίες αντιμετώπισης κατάστασης ανάγκης

#### TMHMA A - 111/2

Υποχρεωτικές ελάχιστες απαιτήσεις για πιστοποίηση πρώτων μηχανικών και δεύτερων μηχανικών σε πλοία με κύρια μηχανή πρόωσης ισχύος 3.000 kW ή άνω

#### Πρότυπο Ικανότητας

- 1 Κάθε υποψήφιος για πιστοποίηση ως πρώτος και δεύτερος μηχανικός ποντοπόρων πλοίων με κύρια μηχανή πρόωσης ισχύος 3.000 kW ή άνω θα απαιτείται να επιδείξει την ικανότητα να αναλαμβάνει σε διακητικό επίπεδο τις εργασίες, καθήκοντα και ευθύνες που παρατίθενται στη στήλη 1 του πίνακα Α-ΙΙΙ/2.
- 2 Η ελάχιστη γνώση, κατάνοηση και επάρκεια που απαιτείται για πιστοποίηση παρατίθεται στην στήλη 2 του πίνακα Α-ΙΙΙ/2. Αυτή ενσωματώνει, διευρύνει και επεκτείνει σε βάθος τα θέματα που παρατίθενται στην στήλη 2 του πίνακα Α-ΙΙΙ/1 για αξιωματικούς που είναι υπεύθυνοι φυλακής μηχανοστασίου.
- 3 Έχοντας υπ 'όψη όπ ο δεύτερος μηχανικός θα πρέπει να είναι σε θέση να αναλάβει τις ευθύνες του πρώτου μηχανικού οπαιαδήποτε στιγμή, η αξιολόγηση σε αυτά τα θέματα θα είναι σχεδιασμένη για να ελέγχει την ικανότητα του υποψηφίου να αφομοιώνει όλες τις διαθέσιμες πληροφορίες που έχουν επιπτώσεις στην ασφαλή λειτουργία των μηχανημάτων του πλοίου και την προστασία του θαλάσσιου περιβάλλοντος.
- 4 Το επίπεδο γνώσης των θεμάτων που παρατίθενται στην στήλη 2 του πίνακα Α-ΙΙΙ/2 θα είναι επαρκές για να είναι σε θέση ο υποψήφιος να υπηρετεί με την ιδιότητα του πρώτου ή δεύτερου μηχανικού'.
- 5 Εκπαίδευση και εμπειρία για την απόκτηση του απαραίτητου επιπέδου θεωρητικών γνώσεων, κατανόησης και επάρκειας θα λαμβάνει υπόψη τις σχετικές απαιτήσεις αυτού του μέρους και τις οδηγίες που δίνονται στο μέρος Β αυτού του Κώδικα.
- 6 Η Διοίκηση μπορεί να παραλείπει απαιήσεις γνώσεων για τύπους μηχανών πρόωσης που είναι διαφορεπκοί από εκείνους για τους οποίους θατσχύει το πιστοποιητικό που πρόκειται να χορηγηθεί. Πιστοποιητικό που χορηγήθηκε κατ' αυτό το τρόπο δεν θα ισχύει για οποιαδήποτε κατηγορία εγκατάστασης μηχανοστασίου που έχει παραλειφθεί έως ότου ο μηχανικός αποδείξει ότι είναι ικανός όσον αφορά αυτές τις απαιτήσεις γνώσεων. Οπαιοσδήποτε τέταιος περιορισμός θα αναφέρεται στο πιστοποιήτικό και στη θεώρηση.
- 7 Κάθε υποψήφιος θα απαιτείται να προσκομίζει αποδεικτικά σταιχεία ότι έχει επιτύχει το απαιτούμενο πρότυπο ικανότητας σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που παρατίθενται στις στήλες 3 και 4 του πίνακα Α-ΙΙΙ/2.

#### Παράκτια Πλόες

8 Το επίπεδο γνώσεων, κατανόησης και επάρκειας που απαιτείται από τα διάφορα τμήματα που παρατίθεντα στη στήλη 2 του πίνακα Α-ΙΙΙ/2, μπορεί να ποικίλουν για αξιωματικούς μηχανής πλοίων με περιορισμένη ισχύ κύριας μηχανής πρόωσης που εκτελούν παράκπους πλόες, όπως θεωρείται απαραίτητο, έχοντας υπ όψη την επίπτωση στην ασφάλεια όλων των πλοίων που μπορεί να δραστηριοποιούνται στα ίδια ύδατα. Οποιοσδήποτε τέτοιος περιορισμός θα αναφέρεται στο πιστοποιητικό και στη θεώρηση.

Ο σχειικές πρότυπες σα ρές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταμασία των εκπαίδεύσεων

# Πίνακας Α-ΙΙΙ/2 Προδιαγραφή ελάχι στου προτύπου ι κανότητας για πρώτους και δεύτερους μηχανι κούς πλοίων με κύρια μηχανή πρόωσης ι σχύος 3000 kW ή άνω

Λειτουργία: Ναυτική μηχανολογία σε δια κητικό επίπεδο

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα ε- πάρκε α	Μέθοδα επίδα- ξηςι κανότητας	Κριτήρια αξιολόγησης της ικανότητας
Διαχείρ ση λειτουργίας μηχανολογικής εγκατά- στασης πρόωσης	Χαρακτηριστικά σχεδιασμού και μη- χανισμός λειτουργίας των ακόλουθων μηχανών και συναφών βοηθητικών:  1 ναυτική μηχανή diesel  2 ναυτικός ατμαστρόβιλος  3 ναυτικός ατμολέβητας	Εξέταση και αξιολόγηση αποδεικτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία.  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου.  .3 εγκεκριμένη εκπαίδευση σε προσομαιωτή, όπου απαιτείτα  .4 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου	Η εξήγηση και κατανόηση των χαρακτηριστικών σχεδιασμού και λευσυργικών μηχανισμών είναι κατάλληλες
Σχεδιασμός και πρό- γραμμα εργασιών	Θεωρηπκές γνώσας Θερμοδυναμ κή και μεταφορά θερμότητας Μηχανική και υδρομηχανική Χαρακτηριστικά πρόωσης μηχανών diesel, ατμοστροβίλων και αεριστροβίλων, συμπεριλαμβανομένης τοχύτητας, απόδοσης και κατανάλωσης καυσίμου Κύκλος θερμότητας, θερμική απόδοση και εξισορρότηση θερμότητας των εξής:  1 ναυπική μηχανή diesel .2 ναυπκός ατμοστρόβιλος .3 ναυπκός αεριστρόβιλος .4 ναυπκός ατμολέβητας Ψύκτες και κύκλος ψύξης Φυσικές και χημικές ιδιότητες καυσίμων και λιπαντικών Τεχνολογία υλικών Ναυπηγική και κατασκευή πλοίου, συμπεριλαμβανομένου ελέγχου ζη-	Εξέταση και αξιολόγηση αποδακτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  1 εγκεκριμένη εμπαιρία κατά την υπηρεσία  .2 εγκεκριμένη εμπαιρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομαιωτή, όπου απαιτείται  .4 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου	Ο σχεδιασμός και η προετα μασία των εργασιών είναι κατάλληλα για πις παραμέτρους σχεδιασμού της εγκατάστασης ισχύος και πις απαιήσεις του πλου

	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκει α	Μέθοδα επίδα ξης ι κανότητας	Κριτήρια αξιολόγησης της ικανότητας
Επιτήρηση λατουργίας, αφολόγηση επιδόσεων και διατήρηση ασφάλειας εγκαταστάσεων πρόω- σης και βοηθητικών μηχανημάτων	Πρακπκές γνώσεις Εκκίνηση και παύση κυρίων μηχανών πρόωσης και βοηθηπκών μηχανημότων συμπεριλομβανομένων των σχεπκών συστημάτων Όρα λειτουργίας εγκατάστασης πρόωσης Αποτελεσμαπκή λειτουργία, παρακολούθηση, αξιαλόγηση απόδοσης και διατήρηση ασφαλείας εγκατάστασης πρόωσης και βοηθηπκών μηχανών Λειτουργίες και μηχανισμός αυτόματου ελέγχου κύρας μηχανής Του ελέγχου για βοηθηπκές μηχανές που συμπεριλαμβάνουν αλλά δεν περιορίζονται σε: 1 συστήματα διανομής γεννήτριας 2 ατμολέβητες 3 καθαριστήρας πετρελαίου 4 σύστημα ψύξης 5 συστήματα άντλησης και σωληνώσεων 6 σύστημα μηχανισμού πηδαλιουχίσς 7 εξοπλισμός διαχείρισης φορτίου και μηχανές καταστρώματος	αποδεκτικών στα χείων	Οι μέθοδα προεταμασίας εκκίνησης και άιθεσης καυσίμων, λιτανικών, ύδοτος ψύξης και αέρα είναι αιλέον κατάλληλες  Ο έλεγχος πέσεων, θερμοκραιαιών και στροφών κατά την εκκίνηση και προθέρμανση είναι σύμφωνος με τεχικές προδιαγραφές και τα συμφωνηθένται σχέδια εργασίας  Η επίβλεψη της κυρίας εγκατάστασης πρόωσης και των βοηθητικών αυστημάτων είναι επαρκής για την τήρηση ασφαλών συνθηκών λετουργίας  Ο μέθοδα προεταμασίας παύσης και επίβλεψης ψύξης της μηχανής είναι αι πλέον κατάλληλες  Ο μέθοδα μέτρησης της ικανότητας φόρπισης των μηχανών είναι σύμφωνες με τεχικές προδιαγραφές  Η απόδοση ελέγχεται έναντι εντολών της γέφυρας Τα επίπεδα απόδοσης είναι σύμφωνα με τεχικές προδιαγραφές
Διαχείριση εργασιών καυσίμου, λίπανσης και έρματος	Λετουργία και συντήρηση μηχανημά- των, συμπεριλαμβανομένων συ- στημάτων άντλησης και σωληνώσε- ων	Εξέταση κα αφολόγηση αποδακτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:	Ο εργασίες καυσίμου και έρματος πληρούν τις λειτουργικές απαιτήσει και εκτελούνται κατά τρόπο ώστε να προλαμβάνεται ρύπανση του θα- λάσσιου περιβάλλοντος
		.1 εγκεκμμένη εμπαρία κατά την υπηρεσία .2 εγκεκμμένη εμπαρία εκπαίδευσης επί πλοίου	
		.3 εγκεκα μένη εκπαίδευ- ση σε προσομαωτή, όπου απατείτα	

Λειτουργία: Μηχανολογία Ηλεκτρική, Ηλεκτρονική και συστημάτων ελέγχου σε δια κηνικό επίπεδο

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκει α	Μέθοδα επίδα ξης ικανότητας	Κα τήα α αξιολόγησης της ι κανότητας
Διαχείριση λα τουργίας ηλεκτρικού και ηλεκτρο- ωκού εξοπλισμού ελέγ- χου	Θεωρηπκές γνώσεις Ναυπκή ηλεκτροτεχνολογία, ηλεκτρο- νική, ηλεκτρονική δυναμική λειτουρ- γία, αυτομαπαμοί και συσκευές α- σφαλείας Χαρακτηριαπικά σχεδιασμού και δια- μόρφωση συστημάτων εξοπλισμού  αυτόματου ελέγχου και συσκευές  ασφαλείας για τα ακόλουθα: .1 κύρια μηχανή .2 γεννήτρια και σύστημα διανομής .3 ατμολέβητας Χαρακτηριαπικά σχεδιασμού και δια- μόρφωση συστημάτων εξοπλισμού  ελέγχου λειτουργίας για ηλεκτρικούς  κυητήρες Χαρακτηριαπικά σχεδιασμού εγκατα- στάσεων υψηλής τάσης Χαρακτηριαπικά εξοπλισμού υδραυ- λικού και πετπεσμένου αέρα	Εξέταση και αξιολόγηση αποδεκτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομαωτή, όπου απαιτείτα  .4 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου	Η λειτουργία εξοπλισμού και συστήματος είναι σύμφωνη με τα εγχειρία ο λειτουργίας Τα επίπεδα απόδοσης είναι σύμφωνα με τεχνικές προδιαγραφές
Διαχείριση ανίχνευσης βλαβών, αποκατάσταση ηλεκρικού κα ηλεκτρο- ω κού εξοπλισμού ελέγ- χου σε κατάσταση λε- τουργίας	Πρακηκές γνώσες Ανίχνευση βλαβών ηλεκτρικού και ηλεκτρονικού εξοπλισμού ελέγχου Δοκιμή λει τουργίας ηλεκτρικού, ηλεκτρονικού εξοπλισμού ελέγχου και συσκευών ασφαλείας Ανίχνευση βλαβών συστημάτων παρακολούθησης Έλεγχος έκδοσης λογισμικού	Εξέταση και αφολόγηση αποδακτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  1 εγκεκριμένη εμπαρία κατά την υπηρεσία 2 εγκεκριμένη εμπαρία εκπαίδευσης επιπλοίου 3 εγκεκριμένη εκπαίδευση σε προσομα ωτή όπου απα τείτα 4 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου	Ο δραστηρ ότητες συντήρησης σχεδιάζονται σωστά σύμφωνα με τεχνικές, νομοθετικές, ἄιαδικαστικές προδιαγραφές και προδιαγραφές ασφαλείας Ο έλεγχος, δοκιμή και ανίχνευση βλαβών εξοπλιαμού είναι κατάλληλα

# Λειτουργία: Συντήρηση και επισκευές σε δια κητικό επίπεδο

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ϳκανότητα	Γνώση, κατανόηση και ε- πάρκεια	Μέθοδα επίδα ξης ικανότητας	Κα τήα α αξιολόγησης της ι κανότητας
ναχεία ση ασφαλών κα ποτελεσμαπκών διαδι- ιασιών επισκευών κα	Θεωρηπκές γνώσεις Πρακτική ναυτικής μηχανολογίας Πρακτικές γνώσεις Διαχείριση ασφαλών και αποτελεσματικών διαδικασιών επισκευών και συντήρησης Σχεδιασμός συντήρησης, συμπεριλαμβανομένων των εκ του νόμου και της κλάσης ελέγχου	Εξέταση και αδιολόγηση αποδακτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκα μένη εμπαιρία κατά την υπηρεσία  .2 εγκεκα μένη εμπαιρία εκπαίδευσης επί πλοίου  .3 εγκεκα μένη εκπαίδευση εργαστηρίου	Οι δραστηριότητες συντήρησης προγραμματίζοντα σωστά κα εκτελούντα σύμφωνα με τεχνικές, νομοθεπικές κα ἄαδικασπικές προ-διαγραφές και προδιαγραφές ασφαλείας Κατάλληλα σχέδα, προδιαγραφές, υλικά και εξοπλισμός είναι διαθέσιμα για επισκευές και συντήρηση Τα μέτρα που λαμβάνονται οδηγούν στην αποκατάσταση της εγκατάστασης με την πλέον κατάλληλη μέθοδο
Ανίχνευση και αναγνώ- μιση αι τίου δυσλειτουρ- γών μηχανών και απο- κατάσταση βλοβών	Πρακηκές γνώσεις Ανίχνευση δυσλειτουργιών μηχανών, εντοπισμός βλαβών και ενέργειες για πρόληψη ζημίας Έλεγχος και ρύθμιση εξοπλισμού Μη καταστροφικός έλεγχος	Εξέταση κα αφολόγηση αποδεκτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από το ακόλουθα:  1 εγκεκριμένη εμπειρία κατά την υπηρεσία 2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου 3 εγκεκριμένη εκπαίδευση προομαωτή, όπου απαιτείτα 4 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστη-	Οι μέθοδα σύγκασης πραγματικών συνθηκών λατουργίας είναι σύμ- φωνες με συνιστώμενες πρακτικές και διακασίες Οι ενέργαες και αποφάσας είναι σύμφωνες με συνιστώμενες προδι- αγραφές λατουργίας και περιορι- σμούς
Εξασφάλιση ασφαλών πρακτικών εργασίας	Πρακπκές γνώσεις Ασφαλείς πρακπκές εργασίας	ρίου Εξέταση κα αξιολόγηση αποδακτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπαρία κατά την υπηρεσία .2 εγκεκριμένη εμπαρία εκπαίδευσης επί πλοίου .3 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστη-	Ο πρακτικές εργασίας είναι σύμφω νες με νομοθετικές απα τήσες, κώ- ἄκες πρακτικής, άδειες εργασίας και περιβαλλοντικές ανησυχίες

## Λα τουργία: Έλεγχος της λα τουργίας του πλοίου και μέρι μνα επι βα νόντων σε δια κητικό επίπεδο

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκεια	Μέθοδα επίδα ξης ι κανότητας	Κα τήα α αξ ολόγησης της ι κανότητας
Ελεγχος διαγωγής, ευ- στάθειας και τάσεων	Κατανόηση βασικών αρχών κατασκευής πλοίου και των θεωριών και παραγόντων που επιδρούν στη διαγωγή και ευστάθεια και των απαροίτητων μετρων για διατήρηση της διαγωγής και ευστάθειας Γνώση ειπιπτώσεων στη διαγωγή και ευστάθεια πλοίου σε περίπτωση ζημίας και μετά από κατάκλυση ενός διαμερίσματος και αντιμέτρα που πρέπει να λαμβάνοντα Γνώση συστάσεων ΙΜΟ που αφορούν την ευστάθεια πλοίου	Εξέταση και αξιολόγηση αποδεικτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομαωτή, όπου εφαρμόζετα	Οι συνθήκες ευστάθειας και τάσεων τηρούνται πάντοτε εντός ορίων ασφάλειας
Παρακολούθηση κα έλεγχος συμμόρφωσης με πς απα τήσας της νομοθεσίας κα μέτρα που εξασφαλίζουν την ασφάλεια της ζωής στην θάλασαο, την ασφάλεια (security) κα την προ- στασία του θαλάσα ου περ βάλλοντος	Γνώση σχεπκού δεθνούς ναυπλακού δικαίου που έχα ενσωματωθεί σε διεθνείς συμφωνίες και συμβάσας  Ιδαίτερη προσοχή θα δίνεται στα ακόλουθα θέματα:  1 πατοπατηπικά και άλλα έγγραφα που απατείτα να φέρονται επί πλοίων από διεθνείς συμβάσας, πως αποκτώνται και χρονική περίοδος νόμμης ισχύος τους  2 ευθύνες σύμφωνα με πις σχεπικές απαιτήσας της Διεθνούς Σύμβασης Γραμμών Φόρτωσης 1966, όπως έχαι τροποπαιηθεί  3 ευθύνες σύμφωνα με πις σχεπικές απαιτήσας της Διεθνούς Σύμβασης για την Ασφάλα της Ζωής στην Θάλασαα, 1974, όπως έχαι τροποπαιηθεί  4 ευθύνες σύμφωνα με την Διεθνή Σύμβαση για την Πρόληψη Ρύπανσης από Πλοία, όπως έχαι τροποπαιηθεί  5 ναυπλιακές δηλώσεις υγείας και απαιτήσας των Διεθνών Κανόνων Υγείας  6 ευθύνες σύμφωνα με τα διεθνή όργαναι που έχουν επίπτωση στην ασφάλαι του πλοίου, επιβατών, πληρώματος ή φορτίου  7 μέθοδαι και βοηθήμαται πρόληψης ρύπανσης του περιβάλλοντος από πλοία  8 γνώση εθνικής νομοθεσίας για την εφαρμογή διεθνών συμφωνών και	Εξέταση κα αφολόγηση αποδεκτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  . 1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομα ωτή, όπου εφαρμόζετα	Ο ἄαδκασίες παρακολούθησης λειτουργών κα συντήρησης είνα σύμφωνες με τις απαιτήσεις της νομοθεσίας Ενδεχόμενη μη συμμόρφωση διαπιστώνετα εγκαίρως και πλήρως Απαιτήσεις ανανέωσης και επέκτασης πιστοπαιτικών εξασφαλίζουν συνεχή ισχύ των επιθεωρούμενων σταχείων και εξοπλισμού

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4	
Ικανότητα	Γνώση, κατανόηση κα ε- πάρκε α	Μέθοδα επίδει ξης ι κανότητας	Κριτήρια αξιολόγησης της ικανότητας	
Διατήρηση της ασφάλα- ας (safety) και ασφάλα- ας (security) στο πλοίο, πλήρωμα και επιβάτες και της λειτουργικότητας των συστημάτων διά- σωσης, πυρόσβεσης και λα πών συστημάτων ασφάλειας	Λεπτομερής γνώση των κανονισμών των σωστικών συσκευών (Δεθνής Σύμβαση για την Ασφάλεια της Ζωής στη Θάλασσα)  Οργάνωση γυμνασίων πυρκαγιάς και εγκατάλει ψης πλοίου Διατήρηση της λειτουργικής κατάστασης σωστικών, συστημάτων πυράσβεσης και λαπών συστημάτων ασφάλειας  Μέτρα που πρέπει να λαμβάνονται για την προστασία και ασφάλεια όλων των επιβαινόντων σε κατάσταση ανάγκης  Μέτρα περιορισμού της ζημίας και δισωσης του πλοίου μετά από πυρκαιά, έκρηξη, σύγκρουση ή προσάραξη	Εξέταση κα αξιολόγηση αποδεικη κών σταχείων που λαμβάνοντα από πρακη κές οδηγίες κα εγκεκα μένη εκπαίδευση κα εμπειρία κατά την υπηρεσία	Οι διαδικασίες παρακολούθησης των συστημάτων πυρανίχνευσης κα ασφάλειας εξασφαλίζουν όπ όλα α συναγερμοί εντοπίζονται έγκα ρα και λαμβάνονται μέτρα σύμφωνα με καθιερωμένες διαδικασίες έκτακτης ανάγκης	
Ανάπτυξη σχεδίων έκτα- κτης ανάγκης και ελέγ- χου ζημιών και χειρισμός καταστάσεων έκτακτης ανάγκης	Κατασκευή πλοίου, περιλαμβανομέ- νου ελέγχου ζημών Μέθοδα κα βοηθήματα για πρόληψη πυρκαγιάς, πυρανίχνευση και πυρό- σβεση	Εξέταση και αξιολόγηση αποδεικτικών στα χείων που λαμβάνονται από εγκεκριμένη εκπαίδευση και εμπειρία κατά την υπηρεσία	Διαά κασίες ανάγκης είναι σύμφω- νες με τα αχέδια που έχουν θεσπι- σθεί για καταστάσεις έκτακτης ανά- γκης	
Χρήση δεξιοτήτων ηγε- σίας και διοίκησης	Λατουργίες και χρήση συσκευών διάσωσης  Γνώση διαχείρισης και εκπαίδευσης προσωπικού επί πλοίου  Γνώση διεθνών ναυπλιακών συμβόσεων και συστάσεων και σχεπκής εθνικής νομοθεσίας  Ικανότητα εφαρμογής διαχείρισης καθηκόντων και φόρτου εργασίας, συμεριλαμβάνομένου:  1 αχεδιασμό και συντονισμό  2 ανάθεση καθηκόντων προσωπικού  3 περαιραμούς χρόνου και πόρων  4 καθορισμό προτεραιοτήτων  Γνώση και ικανότητα εφαρμογής αποτελεσματικής διαχείρισης πόρων:  1 κατανομή, ανάθεση και καθορισμός προτεριοτήτων πόρων  2 αποτελεσματική επικανωνία στο πλοίο και στη ξηρά  3 αι αποφάσεις αντανακλούν την μελέτη εμπειριών ομάδας  4 δυναμισμός και ηγεσία, περιλαμβανομένης της παροχής κινήτρου  5 απόκτηση και τήρηση επίγνωσης	Αξιολόγηση αποδακτικών αταχείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα: .1 εγκεκριμένη εκπαίδευση .2 εγκεκριμένη εμπαρία κατά την υπηρεσία .3 εγκεκριμένη ακπαίδευση προσομα ωτή	Το πλήρωμα αναλαμβάνα καθήκοντα κα ενημερώνετα για τα αναμενόμενα πρότυπα εργασίας και συμπεριφοράς κατά τρόπο κατάλληλο για τα ενά αφερόμενα άτομα  Ο εκπαιδευτικοί στόχα και δραστηρότητες βασίζονται σε αξιολόγηση της τρέχουσας ι κανότητας, δυνατοτήτων και λα τουργικών απαιτήσεων Ο εργασίες δακνύονται όπι είναι αύμφωνες με τους ισχύοντες κανόνες  Ο εργασίες σχειάζονται και απόρα διαπθενται όπως απαιτείται με ορθή προτεραιότητα για την εκτέλεση των απαιραίτητων εργασώ Η επικανωνία δίνεται και λαμβάνεται με σαφή και αδιαμφισβήτητο τρόπο  Δακνύονται αποτελεσματικές συμπεριφορές ηγεσίας	

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα ε- πάρκε α	Μέθοδα επίδειξης ικανότητας	Κριτήρια αξιολόγησης της ι κανότητας
Χρήση δεξιοτήτων ηγε- σίας και διοίκησης (συνέχεια)	Γνώση κα ι κανότητα εφαρμογής τεχνικών λήψης αποφάσεων:  .1 αξιολόγηση κατάστασης και κινδύνου  .2 προσδιομισμός και εξέταση των επιλογών που προκύπτουν  .3 επιλογή σχεδίου δράσης  .4 αξιολόγηση αποτελεσματικότητας έκβασης  Ανάπτυξη, εφαρμογή και επίβλεψη πρότυπων διαδικασιών λατουργίας		Τα απαραίτητα μέλη ομάδας έχουν ακρ βή κατανόηση της τρέχουσας κα προβλεπόμενης κατάστασης του πλοίου κα του εξωτερικού περιβάλλαντος Οι αποφάσεις είναι αι αποτελεσμαπκότερες για την κατάσταση Οι εργασίες δεικνύονται όπι είναι αποτελεσμαπκές και σύμφωνες με ισχύοντες κανόνες

# TMHMA A - 111/3

Υποχρεωτικές ελάχιστες απαιτήσεις για πιστοποίηση πρώτων και δεύτερων μηχανίκών πλοίων με κύρια μηχανή πρόωσης ισχύος μεταξύ 750 kW και 3000 kW

# Πρότυποι κανότητας

- 1 Κάθε υποψήφιος για πιστοποίηση ως πρώτος μηχανικός και δεύτερος μηχανικός ποντοπόρου πλοίου που κινείται με κύρια μηχανή πρόωσης ισχύος μεταξύ 750 kW και 3000 kW θα απαιτείται να επιδείξει ικανότητα ανάληψης σε διακητικό επίπεδο τις εργασίες, καθήκοντα και ευθύνες που παρατίθενται στην στήλη 1 του πίνακα A - III/2.
- 2 Η ελάχιστη γνώση, κατανόηση και επάρκεια που απαιτείται για πιστοποίηση παρατίθεται στην στήλη 2 του πίνακα  $\hat{A}$  - III/2. Αυτή ενσωματώνει, διευρύνει και επεκτείνει σε βάθος τα θέματα που παρατίθενται στην στήλη 2 του πίνακα Α - ΙΙ/1 για αξιωματικούς υπεύθυνους φυλακής μηχανοστασίου σε επανδρωμένο μηχανοστάσιο ή μηχανικούς καθορισμένων καθηκόντων σε περιοδικά μη επανδρωμένο μηχανοστάσιο.
- 3 Έχοντας υπ 'όψη ότι ο δεύτερος μηχανικός θα είναι σε θέση να αναλαμβάνει τις ευθύνες του πρώτου μηχανικού οπαιαδήποτε στιγμή, η αβολόγηση στα θέματα αυτά θα είναι σχεδιασμένη κατά τέταιο τρόπο ώστε να εξετάζεται η ικανότητα του υποψηφίου να αφομαιώνει όλες τις διαθέσιμες πληροφορίες που έχουν επιπτώσεις στην ασφαλή λειτουργία των μηχανημάτων του πλοίου και την προστασία του θαλάσσιου περιβάλοντος.
- 4 Το επίπεδο γνώσης των θεμάτων που παρατίθενται στην στήλη 2 του πίνακα Α ΙΙΙ/2 μπορεί να μειώνεται αλλά θα είναι επαρκές ούτως ώστε να είναι σε θέση ο υποψήφιος να υπηρετεί υπό την ιδιότητα του πρώτου μηχανικού ή δεύτερου μηχανικού στο εύρος ισχύος πρόωσης που ορίζετα σε αυτό το τμήμα.
- 5 Εκπαίδευση και εμπειρία για να εξασφαλίζεται το απαιτούμενο επίπεδο θεωρητικών γνώσεων, κατανόησης και επάρκειας θα λαμβάνει υπόψη τίς σχετικές απαιτήσεις αυτού του μέρους και τις οδηγίες που δίνονται στο μέρος Β αυτού του Κώδικα.
- 6 Η Αρχή μπορεί να παραλείπει απατήσεις γνώσεων για τύπους προωστήριας μηχανής εκτός από εκείνες τις εγκατάστασεις μηχανών για τις οποίες θα ισχύει το πιστοποιητικό που πρόκειτα να εκδοθεί. Πιστοποιητικό που εκδίδεται κατ'αυτό τον τρόπο δεν θα ισχύει για οποιαδήποτε κατηγορία εγκατάστασης μηχανών που έχει παραλειφθεί έως ότου ο αξιωματικός μηχανής αποδείξει ότι είναι ικανός σ' αυτές τις απαιτήσεις γνώσης. Οπαιοσδήποτε τέταιος περιορισμός θα μνημονεύεται στο πιστοπαιητικό και την θεώρηση.
- 7 Κάθε υποψήφιος για πιστοποίηση θα απαιτείται να προσκομίζει αποδεικτικά σταιχεία ότι έχει επιτύχει το επίπεδο ικανότητας σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που παρατίθενται στις στήλες 3 και 4 του πίνακα Α - ΙΙΙ/2.

# Παράκτια Πλόες

8 Το επίπεδο γνώσεων, κατανόησης και επάρκειας που απαιτείται από τα διάφορα τμήματα που παρατίθεντα στην στήλη 2 του πίνακα Α - ΙΙΙ/2 και τις απαιτήσεις των παραγράφων 2.1.1 και 2.1.2 του κανονισμού ΙΙΙ/3 μπορεί να πακίλουν για αξιωματικούς μηχανής πλοίων με κύρια μηχανή πρόωσης ισχύος κάτω των 3000 kW που εκτελούν παράκτιους πλόες, όπως θεωρείται απαραίτητο, έχοντας υπ 'όψη την επίπτωση στην ασφάλεια όλων των πλοίων που μπορεί να δραστηριοποιούνται στα ίδια ύδατα. Οποιοσδήποτε τέτοιος περιορισμός θα αναφέρεται στο πιστοποιητικό και τη θεώρηση.

### **TMHMA A - 111/4**

Υποχρεωτικές ελάχιστες απαιτήσεις για πιστοποίηση μελών πληρώματος που αποτελούν τμήμα φυλακής σε επανδρωμένο μηχανοστάσιο ή έχουν ορισθεί να εκτελούν καθήκοντα σε περιοδικά μη επανδρωμένο μηχανοστάσιο

# Πρότυποι κανότητας

- 1 Κάθε μέλος πληρώματος που είναι μέλος φυλακής μηχανοστασίου σε ποντοπόρο πλοίο θα απατείται να επιδείξει την ικανότητα εκτέλεσης δραστηριότητας ναυτικής μηχανολογίας σε επίπεδο υποστήριξης όπως καθορίζεται στην στήλη 1 του πίνακα Α ΙΙΙ/4.
- 2 Η ελάχιστη γνώση, κατανόηση και επάρκεια που απαιτείται από μέλη πληρώματος που αποτελούν μέρος μηχανοστασίου παρατίθενται στην στήλη 2 του πίνακα Α III/4.
- 3 Κάθε υποψήφιος για πιστοποίηση θα απαιτείται να προσκομίζει αποδεικτικά στοιχεία ότι έχει επιτύχει το απαιτούμενο πρότυπο ικανότητας σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αφολόγησης ικανότητας που καθορίζονται στις στήλες 3 και 4 του πίνακα Α ΙΙΙ/4. Η αναφορά σε "πρακτική δοκιμασία" στη στήλη 3 μπορεί να περιλαμβάνει εγκεκριμένη εκπαίδευση ξηράς όπου οι οπουδαστές υπόκεινται σε πρακτική δοκιμασία.
- 4 Όπου δεν υπάρχουν πίνακες ικανότητας για το επίπεδο υποστήριξης, όσον αφορά ορισμένες δραστηριότητες, παραμένει ευθύνη της Αρχής να προσδιορίζει τις κατάλληλες απατήσεις εκπαίδευσης, αξιολόγησης και πιστοποίησης που πρόκειται να εφαρμόζονται σε προσωπικό που έχει ορισθεί για να εκτελεί αυτές τις λειτουργίες σε επίπεδο υποστήριξης.

# Πίνακας Α-ΙΙΙ/4 Προδι αγραφή ελάχι στου πρότυπου ι κανότητας μελών πληρώματος που αποτελούν τμήμα φυ-λακής μηχανοστασίου

Λειτουργία: Ναυτική μηχανολογία σε επίπεδο υποστήριξης

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκει α	Μέθοδα επίδα ξης ι κανότητας	Κριτήρια αξιολόγησης της ι κανότητας
Εκτέλεση συνήθους φυλακής ανάλογης με τα καθήκοντα μέλους πληρώματος που αποτελεί τμήμα φυλακής μηχανοστασίου Κατανόητα να γίνετα κατανοητός σε θέματα σχετικά με καθήκοντα φυλακής	Ορολογία που χρησιμοπα είτα σε χώρους μηχανημάτων και ονομασία μηχανημάτων και ονομασία μηχανημάτων και εξοπλισμού Διαδικασίες τήρησης φυλακής μηχανοστασίου Ασφαλείς πρακτικές εργασίας όπως σχετίζονται με εργασίες του μηχανοστασίου Βασικές διαδικασίες προστασίας του περιβάλλοντος Χρήση κατάλληλου συστήματος ενδοεπικα νωνιών Συστήματα συναγερμών μηχανοστασίου και εκανότητα διάκρισης μεταξύ διαφόρων συναγερμών, με ιδιαίτερη αναφορά στους συναγερμούς πυρόσβεσης με σέριο	Αξιολόγηση αποδεικτικών σταχείων που λαμβάνοντα από ένα ή περισσότερα από τα σκόλουθα:  1 εγκεκριμένη εμπειρία κατά την υπηρεσία  2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  3 πρακτική δοκιμασία	Οι επικανωνίες είναι σαφείς και περεκτικές και ζητούνται οδηγίες ή δευκρίνιση από τον αξιωματικό φυλακής όπου πληροφορίες ή οδηγίες για την φυλακή δεν γίνονται σαφώς κατανοητές Η τήρηση, παράδοση και απαλλαγή από την φυλακή είναι σύμφωνες με αποδεκτές αρχές και διαδικασίες
Τήρηση φυλακής λέβη- τα: Διατήρηση σωστής στάθμης ύδατος και πιέσεων ατμού	Ασφαλής λατουργία λεβήτων	Αξιολόγηση αποδεκτικών σταχείων που λαμβάνοντα από ένα ή περισσότερα απά τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 πρακτική δοκιμασία ή  .4-εγκεκριμένη-εκπαίδευση σε προσομαωτή, όπου απαιτείτα	Η αξολόγηση της κατάστασης του λέβητα είναι ακριβής και βασίζετα σε σχετικές πληροφορίες που είναι αθέαι μες από τοπικούς και μακρινούς ενδείκτες και φυσικές επιθεωρήσεις  Η αειρά και ο χρόνος των ρυθμίσεων διατηρούν την ασφάλεια και την βέλη στη απόδοση
Χε μσμός εξοπλισμού έκτακτης ανάγκης και εφαρμογή διαδικασιών ανάγκης	Γνώση καθηκόντων ανάγκης Οδοί διαφυγής από χώρους μηχανη- μάτων Εξα κείωση με την θέση και χρήση  εξοπλισμού πυρόσβεσης σε χώρους  μηχανημότων	Αξιολόγηση αποδεικτικών στα χείων που λαμβάνο- νται από επίδειξη και εγκεκριμένη εμπειρία κατά την υπηρεσία ή εγκεκριμένη εμπειρία	Η αρχική ενέργεια όταν αντιλαμβά- νετα κατάσταση έκτακτης ανάγκης ή μη φυσιολογική κατάσταση είνα σύμφωνη με καθερωμένες διαδικα- σίες Οι επικανωνίες είναι πάντοτε σα- φείς και περιεκτικές και αι διαταγές δίνονται κατά τρόπο συνήθη στα πλοία

## Τμήμα Α-ΙΙΙ/5

Υποχρεωτικές ελάχιστες απαιτήσεις για πιστοποίηση μελών πληρώματος ως ειδικευμένων (able)ναυτικών μηχανής σε επανδρωμένο μηχανοστάσιο ή οριζόμενων να εκτελούν καθήκοντα σε περιοδικά μη επανδρωμένο μηχανοστάσιο

# Πρότυποι κανότητας

- 1 Κάθε ειδικευμένος (abie) ναυτικός μηχανής που υπηρετεί σε ποντοπόρο πλοίο με κύρια μηχανή πρόωσης ισχύος 750 kW ή άνω θα απαιτείται να αποδείξει ικανότητα να εκτελεί λειτουργίες σε επίπεδο υποστήριξης, όπως καθορίζονται στη στήλη 1 του πίνακα Α-ΙΙΙ/5.
- 2 Η ελάχιστη γνώση, κατανόηση και επάρκεια που απαιτείται από ειδικευμένο (able) ναυτικό μηχανής που υπηρετεί σε ποντοπόρο πλοίο με κύρια μηχανή πρόωσης ισχύος 750 kW ή άνω παρατίθεται στη στήλη 2 του πίνακα Α-ΙΙΙ/5.
- 3 Κάθε υποψήφιος για πιστοποίηση θα απαιτείται να αποδεικτικά σταιχεία ότι έχει επιτύχει το απαιτούμενο πρότυπο ικανότητας σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που καθορίζονται στις στήλες 3 και 4 του πίνακα Α-ΙΙΙ/5.

# Πίνακας Α-ΙΙΙ/5

Καθορισμός του ελάχι στου προτύπου ι κανότητας για μέλη πληρώματος ως ει δι κευμένα (able) ναυ ει κοί μηχανής σε επανδρωμένο μηχανοστάσιο ή οριζόμενα να εκτελούν καθήκοντα σε περι-

Λειτουργία: Ναυτική μηχανολογία σε επίπεδο υποστήριξης

Στήλη 2	Στήλη 3	Στήλη 4
Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδαξης ι κανότητας	Κα τήα α αξιολόγησης ικανότητας
ίκανότητα κατανόησης εντολών και ετι κα νωνίας με τον αξιωματι- κό φυλακής για θέματα συναφή με καθήκοντα τήρησης φυλακής Διαδικασίες για την αντικατάστα- ση, τήρηση και παράδοση φυλα- κής Πληροφορίες που απαιτούντα για	Αξιολόγηση αποδεικτικών στα χείων που λαμβάνο- νται από εμπειρία κατά την υπηρεσία ή πρακτική δοκιμασία	Οι επικανωνίες είναι σαφείς κα περεκτικές Η συντήρηση, παράδοση και αντικατάσταση από φυλακή είναι σύμφωνη με αποδεκτές πρακτικές και διαδικασίες
την τήρηση ασφαλούς φυλακής Βασικές γνώσεις λειτουργίας και χει μισμού κύμιας μηχανής πρόωσης και βοηθητικών μηχανών Βασική κατανόηση πιέσεων ελέγχου μηχανών κύμιας πρόωσης και βοηθητικών μηχανών	Αξολόγηση αποδεκτικών στα χείων που λαμβάνοντα από ένα ή περιασότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμέμη εμπειρία εκπαίδευσης επί πλοίου  .3 πρακτική δοκιμασία	Η αυχνότητα κα βαθμός παρακολούθησης μηχανών κύριας πρόωσης κα βοηθητικών μηχανών συμμορφώνεται με αποδεκτές αρχές κα διαδικασίες  Ο παρεκκλίσεις από το πρότυπο αναγνωρίζοντα  Μη ασφαλείς συνθήκες ή πιθανοί κίνδυνα αναγνωρίζοντα γρήγορα, αναφέρονται και αποκαθίσταντα πριν την συνέχιση των εργασιών
Γνώση λατουργίας κα χαραμού αυστήματος καυσίμων κα εργασών μεταβίβασης πετρελαίου που αυμπερ λαμβάνουν:  1 προετα μασίες για εργασίες ανεφοδιασμού και μετάγγισης  2 διαδικασίες για σύνδεση και αποσύνδεση αγωγών ανεφοδιασμού και μετάγγισης  3 διαδικασίες σχεπικά με περισταπικά που μπορεί να προκύψουν στη διάρκαια εργασιών ανεφοδιασμού ή μετάγγισης  4 ασφάλεια από εργασίες ανεφοδιασμού και μετάγγισης	Αξιολόγηση αποδακτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  1 εγκεκριμένη εμπαρία κατά την υπηρεσία  2 πρακτική εκπαίδευση  4 εγκεκριμένη εμπαρία εκπαίδευσης επί πλοίου  Αξιολόγηση στα χείων που λαμβάνοντα από πρακτική επίδαξη	Οι εργασίες μεταβίβασης εκτελούνται σύμφωνα με θεσπισμένες πρακτικές ασφαλείας και οδηγίες λει τουργίας εξοτήλισμού  Η διαχείαση επικίνδυνων, αχληρών και επιβλαβών ουσιών συμμορφώνεται με θεσπισμένες πρακτικές ασφαλείας  Οι επικανωνίες στον τομέα ευθύνης του χαιριστή είναι σταθερά επιτυχείς
	Γνώση, κατανόηση κα επάρκα α  Ικανότητα κατανόησης εντολών κα επικα νωνίας με τον αφωμαπκό φυλακής για θέματα συναφή με καθήκοντα τήρησης φυλακής Διαδικασίες για την αντικατάσταση, τήρηση ασφαλούς φυλακής Πληροφορίες που απα τούντα για την τήρηση ασφαλούς φυλακής Βασικές γνώσας λει τουργίας και χαιρισμού κύριας μηχανής πρόωσης και βοηθητικών μηχανών Βασική κατανόηση πεσεων ελέγχου μηχανών κύριας πρόωσης και βοηθητικών μηχανών Τνώση λαιτουργίας και χαιρισμούς και βοηθητικών μηχανών  Τυώση λαιτουργίας και χαιρισμούς αυτούνδεση αγωγών ανεφοδισμούνδεση αγωγών ανεφοδισμού και βετάγγισης  Τα δαιδικασίες σχετικά με περιστισμού ή μετάγγισης  Τα αφάλεια από εργασίες ανεφοδισμού ή μετάγγισης	Κανότητα κατανόηση κα επάρκα α   Μέθοδα επίδα ξης ι κανότητας   Κανότητας   Κανότητας   Κανότητας   Αξολόγηση αποδακη κών στα χείων που λαμβάνοντα πήρησης φυλακής   Αξολόγηση αποδακη κών στα χείων που λαμβάνοντα πήρησης και παράδοση φυλακής   Αξολόγηση αποδακη κάν στα χείων που λαμβάνοντα πήρηση και παράδοση φυλακής   Αξολόγηση αποδα κη κών στα χείων που λαμβάνοντα σης και βοηθηπκών μηχανών   Αξολόγηση αποδα κη κών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:   Αξολόγηση αποδα κη κών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:   Αξολόγηση αποδα κη κών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:   Αξολόγηση αποδα κη κών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:   Αξολόγηση αποδα κη κών στα χείων που λαμβάνοντα στα ένα ή περισσότερα από τα ακόλουθα:   Αξολόγηση αποδα κη κών στα χείων που λαμβάνοντα στα ένα ή περισσότερα από τα ακόλουθα:   Αξολόγηση αποδα κη κών στα χείων που λαμβάνοντα στο ένα ή περισσότερα από τα ακόλουθα:   Αξολόγηση αποδα κη κών στα χείων που λαμβάνοντα στο ένα ή περισσότερα από τα ακόλουθα:   Αξολόγηση αποδα κη κών στα χείων που λαμβάνοντα στο ένα ή περισσότερα από τα ακόλουθα:   Αξολόγηση αποδα κη κών στα χείων που λαμβάνοντα στο ένα ή περισσότερα από τα ακόλουθα:   Αξολόγηση αποδα κη κών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:   Αξολόγηση στα χείων που λαμβάνοντα από πρακη-κή εκποίδευσης επί πλοίου   Αξολόγηση στα χείων που λαμβάνοντα από πρακη-κή επιδεξη   Αξολόγηση στα χείων που λαμβάνοντα από πρακη-κή επίδεξη   Αξολόγηση στα χείων που λαμβάνοντα από πρακη-κή επίδες   Αξολόγηση στα χείων που λαμβάνοντα από πρακη-κή επίδες   Αξολόγηση στα χείων που λαμβάνοντα από πρακη-κή επίδες   Αξολόγηση στα κατά

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ι κανότητας	Κριτήρια αξιολόγησης ικανότητας
Συμβολή σε εργασίες υδρο- συλλεκτών και έρματος	Γνώση ασφαλούς λει τουργίας, χειρισμού και συντήρησης των συστημάτων υδροσυλλεκτών και έρματος, συμπεριλαμβάνουν:  .1 αναφορά περιστατικών που σχετίζονται με εργασίες μετάγησης απος  .2 ικανότητα ορθής μέτρησης και αναφοράς στάθμης δεξαμενών	Αξιολόγηση αποδεικτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 πρακτική εκπαίδευση  .3 εξέταση  .4 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου	Ο εργασίες και η συντήρηση εκτελούνται σύμφωνα με θεσπισμένες προκτικές ασφαλείας και οδηγίες λαιτουργίας εξοπλισμού και αποφεύγεται ρύπανση του θαλάσαιου περιβάλλοντος Οι ετικανωνίες στον τομέαι ευθύνης του χαιριστή είναι σταθερά επιτυχείς
Συμβολή στο χα μ σμό εξοπλι- σμού και μηχανημάτων	Ασφαλής χειμισμός εξοπλισμού συμπεριλαμβάνε:  .1 επιστόμα και αντλίες  .2 ανυψωτήρες και εξοπλισμό ανύψωσης  .3 στόμια κυτών, υδατοστεγείς θύρες ,θυρίδες και συναφής εξοπλισμός  Ικανότητα χρήσης και κατανόησης βασικών σημάτων γερανών, βαρούλκων και ανσψωτήρων	Αξιολόγηση αποδεικτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 πρακτική εκπαίδευση  .3 εξέταση  .4 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  Αξιολόγηση αποδεικτικών στα χείων που λαμβάνονται από πρακτική επίδευξη	Οι εργασίες και η συντήρηση εκτελούνται σύμφωνα με θεσπισμένες πρακτικές ασφαλείας και οδηγίες χα μαμού εξοπλισμού Οι επικανωνίες στον τομέα ευθύνης του χα ματή είναι σταθερά επιτυχείς

# Λει τουργία: Μηχανολογία Ηλεκτρική, Ηλεκτρονική και συστημάτων ελέγχου σε επίπεδο υποστήριξης

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα−	-Γνώση, κατανόηση κα επάρκα α	Μέθοδα επίδε ξης ι κανότητας	Κα τήα α αξιολόγησης ι κανότητας
Ασφαλής χρήση ηλεκτρολο- γικού εξοπλισμού	Ασφαλής χρήση και λειτουργία ηλεκτρολογικού εξοπλισμού, συμεριλαμβάνε: .1 προφυλάξεις ασφαλείας πρινιαπό την έναρξη εργασιών ή επι-	Αξ ολόγηση αποδεικτικών σταχείων που λαμβάνο- ντα από ένα ή περισσότε- ρα από τα ακόλουθα: 1 εγκεκαμένη εμπειρία	Αναγνωρίζει και αναφέρει ηλεκτρολογικούς ανδύνους και μη ασφαλή εξοπλισμό Κατανοεί ασφαλείς τάσεις ηλεκτροκού ρεύματος για χειροκίνητο
	σκευών .2 ἄαἄκασίες απομόνωσης .3 ἄαἄκασίες έκτακτης ανάγκης	κατά την υπηρεσία .2 πρακτική εκπαίδευση .3 εξέταση	εξοπλισμό Κατανοεί κινδύνους συναφείς με εξοπλισμό υψηλής τάσης και εργασία επί του πλοίου
	4 διαφορετικές τάσες ηλεκταικού ρεύματος επί πλοίου  Γνώση απών ηλεκτροπληξίας κα προφυλάξεων που πρέπε να τηρούνται για την πρόληψη της	.4 εγκεκαμένη εμπορία εκπαίδευσης επί πλοίου	

# Λα τουργία: Συντήρηση και επισκευές σε επίπεδο υποστήρι ξης

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδει ξης ι κανότητας	Κριτήρια αξιολόγησης ικανότητας
Συμβολή σε συντήρηση και επισκευές επί πλοίου	Ικανότητα χρήσης υλικών κα εξοπλισμού βαφής, λίπανσης κα καθαρισμού Ικανότητα κατανόησης κα εκτέλεσης ρουπίνας συντήρησης κα δαδικασιών επισκευών Γνώση τεχνικών προεταιμασίας επιφανειών Κατανόηση κατευθυντήριων οδηγιών απορριμμάτων Κατανόηση κατευθυντήριων οδηγιών του κατασκευαστή κα αδηγιών ασφαλείας επί του πλοίου Γνώση εφαρμογής, συντήρησης και χρήσης εργαλείων χειροκίνητης και δυναμικής λειτουργίας και εργαλείων μηχανών	Αξιολόγηση αποδεκτικών στα χείων που λαμβάνοντα από πρακτική επίδεξη Αξιολόγηση αποδεκτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  1 εγκεκριμένη εμπερία κατά την υπηρεσία  .2 πρακτική εκπαίδευση  .3 εξέταση  .4 εγκεκριμένη εμπερία εκπαίδευσης επί πλοίου	Ο δραστημότητες συντήρησης και επισκευής πραγματοπαιούνται σύμφωνα με τεχνικές προδιαγραφές, προδιαγραφές ασφάλειας και διαδικασών  Η επιλογή και η χρήση του εξοπιλισμού και των εργαλείων είναι η κατάλληλη

# Λειτουργία: Έλεγχος λειτουργίας πλοίου και μέρι μνα επιβαινόντων σε επίπεδο υποστήρι ξης

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκα α	Μέθοδα επίδα ξης ι κανότητας	Κριτήρια αξιολόγησης ι κανότητας
Συμβολή στη διαχείριση απο- θεμάτων	Γνώση διαδικασιών ασφαλούς χειρισμού, στα βασίας και ασφά- λισης αποθεμάτων	Αξιολόγηση αποδεικτικών στα χείων που λαμβάνο- ντα από ένα ή περισσότε- ρα από τα ακόλουθα:  1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 πρακτική εκπαίδευση  .3 εξέταση	Οι εργασίες αποθεμάτων εκτελού- ντα σύμφωνα με θεσπισμένες πρακτικές ασφαλείας και οδηγίες λειτουργίας εξοπλισμού Η διαχείριση επικίνδυνων, οχλη- ρών και επιβλαβών αποθεμάτων συμμορφώνεται με θεσπισμένες πρακτικές ασφαλείας Οι επικαινωνίες στον τομέα ευ- θύνης του χειριστή είναι σταθερά
		.4 εγκεκριμένη εμπα ρία εκποίδευσης επί πλοίου	ETR TUXEIS
Εφαρμογή προφυλάξεων κα συμβολή στη πρόληψη ρύ- πανσης του θαλάσα ου περ- βάλλοντος	Γνώση προφυλάξεων που πρέπα να λαμβάνοντα για τη πρόληψη ρύπανσης του θαλάσα ου περιβάλλοντος	Αξιολόγηση αποδεκτικών στα χείων που λαμβάνο- νται από ένα ή περισσότε- ρα από τα ακόλουθα:	Ο δαδικασίες που έχουν σχεδιασθεί για την διαφύλαξη του θαλάσσιου περιβάλλοντος τηρούντο πάντοτε
	Γνώση της χρήσης κα λειτουργίας του εξοπλισμού καταπολέμησης της ρύπανσης	1 εγκεκα μένη εμπα ρία κατά την υπηρεσία	
	Γνώση εγκεκριμένων μεθόδων γα τη ἄάθεση θαλάσσιων ρύπων	.2 πρακτική εκπαίδευση .3 εξέταση	
		.4 εγκεκα μένη εμπο ρία εκπαίδευσης επί πλοίου	

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδε ξης ι κανότητας	Κα τήα α αξ ολόγησης ικανότητας
Εφαρμογή διαδικασιών επαγγελματικής υγιανής και προφυλάξεων ασφαλείας	Εργασιακή γνώση ασφαλών εργασιακών πρακτικών και προσωπικής ασφάλειας επί πλοίου, συμπεριλαμβάνουν:  .1 ηλεκτρική ασφάλεια .2 αδρανοποίηση/ αποσύνδεση .3 μηχανική ασφάλεια .4 άδεια εργασίας σε αυστήματα .5 εργασία σε ύψος .6 εργασία σε κλειστούς χώρους .7 τεχνικές ανύψωσης και μέθοδα πρόληψης τραυματισμών στη πλάτη .8 ασφάλεια από χημικούς και βιολογικούς ανδύνους	Αξιολόγηση αποδεικτικών στα χείων που λαμβάνοντα από ένα ή περισσότερο από τα ακόλουθα:  1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 πρακτική εκπαίδευση  .3 εξέταση  .4 εγκεκριμένη εμπειρία εκπαίδευσης στο	Ο δαδκασίες που έχουν σχεδασθεί για την προστασία προσωτικού και πλοίου τηρούνται ανά πάσα στιγμή Ο ασφαλείς πρακτικές εργασίας τηρούνται και ο κατάλληλος προστατευτικός εξοπλισμός και εξοπλισμός ασφαλείας χρησιμοπαούνται πάντοτε με ορθό τρόπο
	.9 εξοπλισμός προσωπικής α- σφάλειας		

Τμήμα Α-ΙΙΙ/6

Υποχρεωτικές ελάχιστες απαιτήσεις για πιστοποίηση ηλεκτροτεχνικών αξιωματικών

# Εκπαίδευση

1 Η εκπαίδευση και επιμόρφωση που απαιτείται από την παράγραφο .2.3 του κανονισμού ΙΙΙ/6 θα περιλαμβάνει εκπαίδευση σε δεξιότητες ηλεκτρονικού και ηλεκτρικού εργαστηρίου συναφείς με τα καθήκοντα ηλεκτροτεχνικού αξιωματικού.

# Εκπαίδευση επί πλοίου

- 2 Κάθε υποψήφιος για πιστοποίηση ως ηλεκτροτεχνικός αξιωματικός θα ακολουθεί εγκεκριμένο πρόγραμμα εκπαίδευσης επί πλοίου που:
  - .1 εξασφαλίζει ότι, στη διάρκεια της απαιτούμενης περιόδου θαλάσσιας υπηρεσίας ο υποψήφιος λαμβάμει συστηματική πρακτική εκπαίδευση και εμπειρία στις εργασίες, καθήκοντα και ευθύνες ηλεκτροτεχνικού αξωματικού,
  - .2 επιτηρείται στενά και παρακολουθείται από προσοντούχους και πιστοπαιημένους αξιωματικούς επί των πλοίων στα οπό α πραγματοπαιείται η εγκεκριμένη θαλάσσια υπηρεσία, και
  - .3 είναι επαρκώς συμπληρωμένο το βιβλίο εγγραφών εκπαίδευσης.

# ΓΙρότυποι κανότητας

- 3 Κάθε υποψήφιος για πιστοποίηση ως ηλεκτροτεχνικός αξιωματικός θα απαιτείται να επιδεικνύει την ικανότητα ανάληψης των εργασιών, καθηκόντων και ευθυνών που αναφέρονται στη στήλη 1 του πίνακα Α-ΙΙΙ/6.
- 4 Η ελάχιστη γνώση, κατανόηση και επάρκεια που απαιτείται για πιστοποίηση παρατίθεται στη στήλη 2 του πίνακα Α-ΙΙΙ/6 και θα λαμβάνει υπ' όψη τις οδηγίες που δίνονται στο μέρος Β αυτού του Κώδικα.
- 5 Κάθε υποψήφιος για πιστοποίηση θα απαιτείται να παρέχει σταιχεία όπ έχει επιτύχει το απαιτούμενο πρότυπο ικανότητας που παρατίθεται στις στήλες 3 και 4 του πίνακα Α-ΙΙΙ/6.

# ΓΊνακας Α-ΙΙΙ/6 Καθορι σμός ελάχι στου πρότυπου ι κανότητας για ηλεκτροτεχνι κούς αξιωματικούς

Λει τουργία: Μηχανολογία Ηλεκτρική, Ηλεκτρονική και συστημάτων ελέγχου σε επιχειρησιακό επίπεδο

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ι κανότητας	Κα τήα α αξιολόγησης ι κανό- τητας
Παρακολούθηση λετουργίας ηλεκτρικών, ηλεκτρικών, ηλεκτρικών ελέγ-χου	Βασική κατανόηση λειτουργίας μηχανολογικών συστημάτων, συμπερ λαμβάνουν:  1 κύριους κινητήρες που περιλαμβάνουν την κύρια εγκατάσταση πρόωσης  2 βοηθητικά μηχανήματα μηχανοστασίου  3 συστήματα διαχείρισης φορτίου  5 μηχανήματα καταστρώματος  6 συστήματα ξενοδοχειακού εξοπλισμού  Βασική γνώση μετάδοσης θερμότητας, μηχανικής και υδρομηχανικής Γνώση:  Ηλεκτροτεχνολογίας και θεωρίας ηλεκτρικών μηχανών  Βασικά στα χεία ηλεκτρινικών και ηλεκτρονικής δυναμικής λειτουργίας και ηλεκτρολογικός εξοπλισμός  Βασικά στα χεία αυτοματισμού, αυτόματων συστημάτων ελέγχου και τεχνολογίας  Ενοργάνωση, συστήματα συναγερμού και παρακολούθησης  Ηλεκτριοιοχικός εξοπλισμός  Ενοργάνωση, συστήματα συναγερμού και παρακολούθησης  Ηλεκτριοιοχικό και ηλεκτριοιοχικών υλικών  Ηλεκτριοιοδραυλικά και ηλεκτριοτεπεσιμένου αξρα συστήματα ελέγχου  Εκτίμηση των κινδύνων και προφυλάξεων που απαιτούνται για τη λειτουργία συστημάτων τοχύος άνω των 1000 νοίτ	Εξέταση και αξιολόγηση αποδεκτικών στα χείων που λαμβάνονται από ένα ή περασότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομα ωτή, όπου απαιείτα  .4 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου	Η λειτουργία εξοπλισμού και συστημάτων είναι σύμφωνη με εγχειρίδια λειτουργίας Τα επίπεδα απόδοσης είναι σύμγωνα με τεχνικές προδιαγραφές

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκεια	Μέθοδα επίδα ξης ι κανότητας	Κα τήα α αξ ολόγησης ι κανό- τητας
Παρακολούθηση λειτουργί- ας αυτόματων συστημάτων ελέγχου πρόωσης κα βοη- θητικών μηχανημάτων	Προετα μασία συστημάτων ελέγχου πρόωσης και βοηθητικών μηχανημά- των για τη λειτουργία	Εξέταση και αξιολόγηση αποδεικτικών στα χείων που λαμβάνονται από έναι ή περισσότερα από τα ακόλουθα:	Η εποπτεία της κύριας εγκατάστασης πρόωσης και των βοηθητικών συστημά- των είναι επαρκής για την τήρηση κατά- στασης ασφαλούς λειτουργίας
		.1 εγκεκα μένη εμπειρία κατά την υπηρεσία	•
		.2 εγκεκα μένη εμπα ρία εκπαίδευσης επί πλοίου	
	·	.3 εγκεκριμένη εκπαίδευ- ση σε προσομαωτή, όπου απαιτείτα	
		.4 εγκεκα μένη εκπαίδευ- ση εξοπλισμού εργαστη- ρίου	
Χειρισμός γεννητριών και συστημάτων διανομής	Ζεύξη, καταμερισμός φορτίου και ε- ναλλαγή γεννητριών Ζεύξη και διακοπή σύνδεσης μεταξύ κεντακών πινάκων και πινάκων δια-	Εξέταση και αξιολόγηση αποδεκτικών στα χείων που λαμβάνονται από ένα η περισσότερα από τα ακόλουθα:	Οι εργασίες σχεδιάζονται και εκτελούνται σύμφωνα με εγχειρίδα λειτουργίας, καθ ερωμένους κανόνες και διαδικασίες για την εξασφάλιση της ασφάλειας των εργασιών
	νομής	.1 εγκεκριμένη εμπαρία κατά την υπηρεσία	Τα ηλεκτρικά συστήματα διανομής μπο- ρούν να γίνονται κατανοητά και να επεξη γούντα μεσχέδια / οδηγίες
		.2 εγκεκρ μένη εμπο ρία εκπαίδευσης επί πλοίου	
	·	.3 εγκεκρ μένη εκπαίδευση σε προσομα ωτή, όπου απα τέιτα	
·	·	.4 εγκεκρ μένη εκπαίδευ- ση εξοπλισμού εργαστη- ρίου	
Χερσμός και τήρηση συ- -στημάτων ισχύος άνω των 1000 volt	Θεωρηπκές γνώσεις Τεχνολογία υψηλής τάσης	Εξέταση και αξιολόγηση αποδεκτικών στα χείων που λαμβάνονται από ένα ή περιασότερα από τα ακόλουθα:	Ο εργασίες σχεδιάζονται και εκτελούντο σύμφωνα με εγχειρίδια λειτουργίας, καθ ερωμένους κανόνες και διαδικασίες για την εξασφάλιση της ασφάλειας των εργο σών
	Μέτρα και διαδικασίες ασφαλείας Ηλεκτρική πρόωση πλοίων, ηλεκτρι- κών μηχανών και συστήματα ελέγχου	.1 εγκεκαμένη εμπαρία κατά την υπηρεσία	
	Πρακτικές γνώσεις	.2 εγκεκα μένη εμπα ρία εκπαίδευσης επί πλοίου	
	Ασφαλής λειτουργία κα τήρηση συ- στημάτων υψηλής τάσης , συμπεα- λαμβανομένου γνώσης ειδικού τεχνι- κού τύπου συστημάτων υψηλής τάσης και του κινδύνου που απορρέει από	,3 εγκεκρ μένη εκπαίδευση σε προσομαωτή, όπου απατείτα	
	τάση λειτουργίας άνω των 1000 volt	.4 εγκεκριμένη εκπαίδευ- ση εξοπλισμού εργαστη- ρίου	

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκει α	Μέθοδα επίδαξης ι κανότητας	Κριτήρια αξιολόγησης ικανό- τητας
Χερισμός υπολογιστών και δικτύων υπολογιστών επί πλοίων	Κατανόηση:  .1 κύρων χαρακτηρ στικών επεξεργασίας δεδομένων  .2 κατασκευής και χρήσης δικτύων υπολογιστών επί πλοίων  .3 χρήσης υπολογιστών της γέφυρας, του μηχανοστασίου και του εμπορικού τμήματος	Εξέταση και αξιολόγηση αποδεικτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκταίδευση σε προσομαιωτή, όπου απαιτείτα  .4 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου	Υπολογιστές και δίκτυα υπολογιστών ελέγχονται και διαχαρίζονται σωστά
Χρήση Αγγλικής σε γραπτή και προφορική μορφή	Επαρκής γνώση Αγγλικής για να μπορεί ο αξιωματικός να χρησιμοπα- εί μηχανολογικές εκδόσεις και να εκτελεί καθήκοντα αξιωματικού	Εξέταση και αξιολόγηση αποδεκτικών στα χείων που λαμβάνονται από πρακτικές οδηγίες	Εκδόσεις στην Αγγλική συναφείς με τα καθήκοντα αξιωματικού ερμηνεύονται σωστά Οι εττικανωνίες είναι σαφείς και κατανοη-
Χρήση συστημάτων ενδοε- τιι κανωνίας	Λε τουργία όλων των συστημάτων ενδοετικα νωνίας επί του πλοίου	Εξέταση και αξιολόγηση αποδεικτικών στα χείων που λαμβάνονται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου .3 εγκεκριμένη εκπαίδευση σε προσομαιωτή, όπου απαιτείτα	Η μετάδοση και λήψη μηνυμάτων είναι σταθερά επιτυχής Τα αρχεία επικανωνίας είναι πλήρη, ακριβή και συμμορφώνονται με θεσμικές απαιτήσεις
		.4 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου	

# Λειτουργία: Συντήρηση και επισκευή σε επιχειρησιακό επίπεδο

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- ττάρκει α	Μέθοὄα επίδα ξης ι κανότητας	Κα τήμα αξιολόγησης ικανό- τητας
Συντήρηση και επισκευή ηλεκτρικού και ηλεκτρονι - κού εξοπλισμού	Απατήσεις ασφαλείας για την εργασία σε ηλεκτρικά συστήματα επί του πλοίου συμπεριλαμβανομένου της ασφα-	Εξέταση και αξιολόψηση αποδεικτικών στα χείων που λαμβάνονται από ένα	Τα μέτρα ασφαλείας για την εργασία είνα κατάλληλα
kou eganwopou	λούς απομόνωσης ηλεκτακού εξοπλομού που οπαιτείται πριν επιτραπεί στο προσωτικό να εργασθεί σε τέτα ο	ή περισσότερα από τα ακόλουθα:	Η επιλογή και χρήση εργαλείων χαιρός, οργάνων μέτρησης και εξοπλισμού δοκ- μών είναι κατάλληλη και η ερμηνεία απο-
	εξοπλισμό	.1 εγκεκα μένη εμπειρία κατά την υπηρεσία	τελεσμάτων είναι ακριβής
	Συντήρηση και επισκευή εξοπλισμού ηλεκταικών συστημάτων, πινάκων	.2 εγκεκα μένη εμπα ρία	Η αποσυναρμολόγηση, έλεγχος, επισκευή και επανασυναρμολόγηση είνα

δακοπτών, ηλεκτακών μηχανών. γεννηταών κα ηλεκτακών συστημά-	εκπαίδευσης επί πλοίου	σύμφωνες με εγχαρίδα και καλή πρακτι-
των κα εξοπλισμού DC		

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα ε- πάρκε α	Μέθοδα επίδα ξης ι κανότητας	Κριτήρια αξιολόγησης ικανό- τητας
Συντήρηση και επισκευή ηλεκτρικού και ηλεκτρονι- κού εξοπλισμού (συνέχεια)	Ανίχνευση ηλεκτρικών δυσλειτουρ- γιών, εντοπισμός βλαβών και μέτρα πρόληψης ζημίας Κατασκευή και λειτουργία ηλεκτρικού εξοπλισμού δοικιμών και μετρήσεων Δοικμές λειτουργίας και απόδοσης του ακόλουθου εξοπλισμού και της διάτα- ξης του: .1 συστημάτων παρακολούθησης .2 αυτόματων συσκευών ελέγχου .3 συσκευών προστασίας Ερμηνεία ηλεκτρικών και ηλεκτρονικών διαγραμμάτων	.3 εγκεκα μένη εκπαίδευση σε προσομα ωτή, όπου απα τείτα .4 εγκεκα μένη εκπαίδευση εξοπλισμού εργαστη-	Η επανασυναρμολόγηση κα η δοκιμή απόδοσης είνα σύμφωνες με εγχειρίδια και καλή πρακτική
Συντήρηση και επισκευή συστημάτων αυτομαπομού και ελέγχου μηχανών κύ- ρας πρόωσης και βοηθηπ-κών μηχανών	Κατάλληλες ηλεκτρικές και μηχανικές γνώσες και δεξότητες Διαδικασίες ασφάλειας και έκτακτης ανάγκης Ασφαλής απομόνωση εξοπλισμού και σχετικών συστημάτων πριν επιτραπεί στο προσωπικό να εργαστεί σε τέταια εγκατάσταση ή εξοπλισμό Πρακτική γνώση δοκιμών, συντήρησης, εύρεσης βλαβών και επισκευών Δοκιμές, εντοπισμός βλαβών και συντήρηση και αποκατάσταση ηλεκτρικού και ηλεκτρονικού εξοπλισμού ελέγχου σε κατάσταση λειτουργίας	Εξέταση κα αξιολόγηση αποδεικικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομαωτή, όπου απα τείτα  .4 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστη-ρίου	Οι επιπτώσες δυσλειτουργιών στις σχε κές εγκαταστάσες και συστήματα ανακές εγκαταστάσες και συστήματα ανατου πλοίου ερμηνεύονται σωστά, τα όργανα μέτρησης και βαθμονόμησης χρης μοπαιούνται σωστά και ενέργεις ποι γίνονται απολογούντα!  Η απομόνωση, αποσυναρμολόγηση και επανασυναρμολόγηση εγκατάστασης και εξοπλισμού είναι σύμφωνες με τις οδηγες ασφαλείας του κατασκευαστή και τις επί του πλοίου οδηγίες και νομοθετικές προδιαγραφές και προδιαγραφές ασφαλείας. Οι ενέργεις που λαμβάνουν χώς οδηγούν στην αποκατάσταση συστημά των αυτοματισμού και ελέγχου με την πλέον κατάλληλη μέθοδολογία τις επικρατούσες συνθήκες και περιστάσες
Συντήρηση και επισκευή εξοπλισμού γέφυρας ναυ- α πλοΐας και συστημάτων επικα νωνίας πλοίου	Γνώση αρχών κα ἄαἄκασών συντή- ρησης εξοπλομού ναυαπλοίας, αυ- στημάτων εσωτερικής και εξωτερικής επικανωνίας  Θεωρηπικές γνώσεις  Πρακτικές γνώσεις  Εκτέλεση ασφαλών ἄαἄκασών συ- ντήρησης και επισκευών  Ανίχνευση μηχανικών δυσλειτουργιών, εντοπισμός βλαβών και μέτρα πρόλη- ψης ζημίας		Οι επιπιώσες δυσλετουργιών σε συνδ δεμένα συστήματα και εγκαταστάσες αναγνωρίζονται ακη βώς, τα τεχνικά σχ όσι του πλοίου ερμηνεύονται σωστά, τι όργαναι μέτρησης και βαθμονόμησης χρησιμοπαιούνται σωστά και αι ενέργαι που εκτελούνται είναι αιπολογημένες. Η απομόνωση, αποσυναρμολόγηση κι επανασυναρμολόγηση εγκατάστασης εξοπίναμού είναι σύμφωνες με τις οδη ες ασφαλείας του κατασκευαστή και οί γίες επί του πλοίου, νομοθετικές προδί γραφές και προδιαγραφές ασφαλείας, μέτρα που λαμβάνονται οδηγούν στην αποκατάσταση εξοπίναμού ναυσιπλοί γέφυρας και των συστημάτων επικανίας του πλοίου με την πιο κατάλληλη μέθοδο για τις επικρατούσες συνθήκες και περιστάσες

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκει α	Μέθοδα επίδαξης ι κανότητας	Κα τήα α αξιολόγησης ι κανό- τητας
Συντήρηση και επισκευή ηλεκτρικών, ηλεκτρονικών συστημάτων και συστημά- των ελέγχου μηχανημάτων καταστρώματος και εξοπλ- σμού χαιρισμού φορτίου	Κατάλληλες ηλεκτρικές και μηχανικές γνώσεις και δεφότητες Διαδικασίες ασφαλείας και έκτακτης ανάγκης Ασφαλής απομόνωση εξοπλισμού και συνδεδεμένων συστημάτων τηρ επιτραπεί στο προσωπικό να εργαστεί σε τέτα α εγκατάσταση ή εξοπλισμό Πρακτική γνώση δοκιμών, συντήρησης, εύρεσης βλαβών και επισκευών Δοκιμές, εντοπισιμός βλαβών και αποκατάσταση λειτουργίας ηλεκτρικού και ηλεκτρονικού εξοπλισμού ελέγχου σε κατάσταση λειτουργίας	Εξέταση κα αξιολόγηση αποδακτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  1 εγκεκριμένη εμπαιρία κατά την υπηρεσία  2 εγκεκριμένη εμπαιδευσης επί πλοίου  3 εγκεκριμένη εκπαίδευση σε προσομα ωτή, όπου απα τείτα  4 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου	Οι ετεπτώσες δυσλετουργιών σε συνδε- δεμένα συστήματα κα εγκαταστάσες  αναγνωρίζοντα ακριβώς, τα τεχνικά σχέ- ᾶα του πλοίου ερμηνεύοντα σωστά, τα  όργανα μέτρησης και βαθμονόμησης  χρησιμοπαιούντα αωστά και α ενέργεις  που εκτελούνται είναι απολογημένες  Η απομόνωση, αποσυναρμολόγηση και  επανασυναρμολόγηση εγκατάστασης και  εξοπλισμού είναι σύμφωνες με τις οδηγίες ασφαλείας του κατασκευαστή και οδη- γίες επί του πλοίου, νομοθετικές προδα- γραφές και προδιαγραφές ασφαλείας. Τα  μέτρα που λαμβάνονται οδηγούν στην  αποκατάσταση εξοπλισμού καταστρώμα- τος και χειρισμού φορτίου με την πιο  κατάλληλη μέθοδο για τις επεκρατούσες  συνθήκες και περιστάσες
Συντήρηση και επισκευή αυστημάτων ελέγχου κα ασφαλείας ξενοδοχειακού εξοπλισμού	Θεωρηπκές γνώσεις Ηλεκτρικά και ηλεκτρονικά συστήματα που λειτουργούν σε εύφλεκτες περιοχές Πρακτικές γνώσεις Εκτέλεση ασφαλών διαδικασιών συντήρησης και επισκευών Ανίχνευση μηχανικών δυσλειτουργιών, εντοπισμός βλαβών και μέτρα πρόληψης ζημίας		Οι επιπιώσες δυσλετουργιών σε συνδεδεμένα συστήματα κα εγκαταστάσες αναγνωρίζονται ακριβώς, τα τεχικά σχέδα του πλοίου ερμηνεύονται σωστά, τα όργανα μέτρησης και βαθμονόμησης χρησιμοπαιούνται σωστά και α ενέργεες που εκτελούνται είναι απολογημένες Η απομόνωση, αποσυναρμολόγηση και επανασυναρμολόγηση εγκατάστασης και εξοπλισμού είναι σύμφωνες με τις οδηγίες ασφαλείας του κατασκευαστή και οδηγίες επί του πλοίου, νομοθετικές προδιαγραφές και προδιαγραφές ασφαλείας. Τα μέτρα που λαμβάνονται οδηγούν στην αποκατάσταση των συστημάτων ελέγχου και ασφάλειας του ξενοδοχειακού εξοπλισμού με την πιο κατάλληλη μέθοδο για τις επικρατούσες συνθήκες και περιστάσεις

Λειτουργία: Έλεγχος της λειτουργίας του πλοίου και μέρι μνα επιβαινόντων σε επιχειρησιακό επίπεδο

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4	
Ικανότητα	Γνώση, κατανόηση και ε- πάρκα α	Μέθοδα επίδαξης ι κανότητας	Κα τήρια αξιολόγησης ικανό- τητας	
Εξασφάλιση συμμόρφωσης με απα τήσεις πρόληψης ρύπανσης	Πρόληψη ρύπανσης θαλάσσιου περιβάλλοντος Γνώση των μέτρων που πρέπει να λαμβάνονται για την πρόληψη της ρύπανσης του θαλάσσιου περιβάλλοντος	Εξέταση και αξιολόγηση απποδακτικών στα χείων που λαμβάνονται από έναι ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπαιρία κατά την υπηρεσία	Ο διαδιικασίες για την παρακολούθηση εργασιών επί του πλοίου και την εξασφάλση συμμόρφωσης με απαιτήσες πρόληψης ρύπανσης πηρούνται πλήρως Ενέργειες για να εξασφαλίζεται η διατήρηση περιβαλλοντικού προτύπου	
	Ανη-ρυπανηκές διαδικασίες και όλος ο συναφής εξοπλισμός	.2 εγκεκριμένη εμποιρία εκπαίδευσης επί πλοίου		
	Σημασία των μέτρων προφύλαξης για την προστασία του θαλάσσιου περι-	.3 εγκεκριμένη εκπαίδευ-		

	ιάλλοντος		
Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- Ι πάρκει α	Νέθοδα επίδα ξης ι κανότητας	Κα τήρια αξιολόγησης ικανότη- τας
άς και πυρόσβεση επί ιλοίου	πυρκαγιάς  Το μετικού τητα να οργανώνει γυμνάσια  Το μετικού τητα να οργανώνει γυμνάσια  Το μετικού τητα να οργανώνει γυμνάσια  Το μετικού τητα να οργανώνει γυμνάσια το και το και όσους και χριμείας της	E was grounding	Ο τύπος και η κλίμακα του προβλήματος αναγνωρίζονται γρήγορα και αι αρχικές ενέργεες είναι σύμφωνες με την άιαδικασία έκτακτης ανάγκης και τα σχέδια ανάγκης για το πλοίο Οι διαδικοίες εκκένωσης, διακοπής λετουργίας ανάγκης και απομόνωσης είναι κατάλληλες για τη φύση της έκτακτης ανάγκης και εφαρμόζονται γρήγορα Η αιερά προτεραιότητας και τα επίπεδα και χρνοδιαγράμμαται αναφορών και ενημέρωσης προσωπικού είναι συναφή με τη φύση της ανάγκης και αντανακλούν το επείγον του προβλήματος
Χερισμός σωστικών μέσων	Σωστικά  Ικανότητα οργάνωσης γυμνασίαων εγκατάλει ψης πλοίου και γνώση λειτουργίας σκαφών επιβίωσης και λέμβων διάσωσης, των συσκευών και ρυθμίσεων καθαίρεσης και του εξοπλισμού τους, συμπεριλαμβανομένων ασύρματων συσκευών διάσωσης, δορυφορικών ΕΡΙRB, SART, στολών εμβάππισης και θερμικών πρόστατευτικών βοηθημάτων	Αξολόγηση αποδεκη- κών στα χείων που λαμ- βάνοντα από εγκεκριμέ- νη εκπαίδευση κα ε- μπα ρία όπως καθορίζο- ντα στο τμήμα Α-VI/2, παράγραφα 1-4	Οι ενέργειες ανταπόκρισης σε εγκατάλεψη πλοίου και καταστάσεις επιβίωσης είναι κατάλληλες για τις επικρατούσεις συνθήκες και περοτάσεις και συμμορφώνονται με αποδεκτές πρακτικές και πρότυπα ασφαλείας
Παροχή ιστρ κών πρώτων βοηθα ών επί πλοίου	Ιατρική βοήθαα Πρακτική εφαρμογή ιστα κών οδηγών και συστάσεων μέσω ασυρμάτου, συμπερ λαμβανομένης της ικανότητας λήψης αποτελεσματικών μέτρων με βάση αυτές τις γνώσας σε περίπτωση ατυχημάτων ή ασθεναών που είνα πιθανό να προκυψουν επί πλοίου	Αξιολόγηση αποδεικτ- κώνν στα χείων που λαμβάνοντα από εγκε- κρ μένη εκπαίδευση όπως καθορίζοντα στο τμήμα Α-VI/4, παράγρα- φα 1-3	Η αναγνώρ ση τη θανών αι τίων, φύσης και έκτασης τραυμάτων ή συνθηκών είναι γρήγορη και η θεραπεία ελαχιστοπα εί την άμεση απαλή για τη ζωή
Εφαρμογή δεξιοτήτων ηγε- σίας και ομαδικής εργασίας	Εργασιακή γνώση διοίκησης και εκ-	.3 πρακτική επίδει ξη	Το πλήρωμα αναλαμβάνα καθήκοντα κα ενημερώνετα για τα αναμενόμενα πρότυ πα εργασίας κα συμπερφοράς κατά τρό ενημερώνετα για τα αναμενόμενα πρότυ πα εργασίας κα συμπερφοράς κατά τρό εκπα δευπκοί στόχα κα δραστημότητες βασίζοντα σε αξιολόγηση τρέχουσας κών απα τήσεων  Ο εργασίες αχειδιάζοντα και α πόρα κατανέμοντα όπως απα τείτα με ορθή προτερα ότητα για την έκτέλεση των απα ραίτητων καθηκόντων  Αθκνύονται αποτελεσματικές συμπερφικό η τρές ηγεσίας  Τα απαραίτητα μέλη ομάδας έχουν ακρικότος κατάστασης του πλοίου και του καθεστώτος λατουργίας και του εξωτερ

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκει α	Μέθοδα επίδα ξης ι κανότητας	Κριτήρια αξιολόγησης ικανό- τητας
Εφαρμογή δεξ οτήτων ηγεσίας και ομαδικής εργασίας (συνέχεια)	4 δυναμισμός και ηγεσία, περιλαμβανομένης της παροχής κινήτρου 5 απόκτηση και τήρηση επίγνωσης της κατάστασης		Ο αποφάσεις είναι α αποτελεσματικότε- ρες για την κατάσταση
	Γνώση και ικανότητα εφαρμογής τεχνι- κών λήψης αποφάσεων: .1 αξιολόγηση κατάστασης και κινδύ- νου		
	.2 προσά ορ σμός και εξέταση των επιλογών που προκύπτουν .3 επιλογή σχεδίου δράσης	-	
	.4 αξιολόγηση αποτελεσματικότητας έκβασης		
Συμβολή στην ασφάλεια προσωπικού και πλοίου	Γνώση τεχνικών προσωπικής επιβίωσης Γνώση πρόληψης και ικανότητα καταπολέμησης πυρκαγιάς και πυρόσβεσης Γνώση στα χεωδών πρώτων βοηθεών Γνώση προσωπικής ασφάλειας και καινωνικών ευθυνών	Αξιολόγηση αποδεικτιών στα χείων που λαμβάνο- νται από εγκεκριμένη εκπαίδευση και εμπειρία όπως καθορίζονται στο τμήμα Α-VI/1, παράγρα- φος 2	Ο κατάλληλος προσταττευτικός εξοπλομός και εξοπλισμός ασφαλείας χρησιμοπαιούνται σωστά  Ο ἄαᾶκασίες και ασφαλείς εργασιακές πρακτικές που έχουν σχεᾶασθεί για την προστασία του προσωπικού και του πλοίου τηρούνται πάντοτε  Ο ἄαᾶκασίες που έχουν σχεᾶασθεί για τη ᾶαφύλαξη του περιβάλλοντος προύνται πάντοτε
·			Ο αρχικές και ακόλουθες ενέργειες για την απόκτηση επίγνωσης έκτακτης ανά- γκης συμμορφώνονται με θεσπισμένες διαδικασίες αντιμετώπισης έκτακτης ανά- γκης

Τμήμα Α-ΙΙΙ/7

.... Υποχρεωτικές ελάχιστες απαιτήσεις για πιστοποίηση ηλεκτροτεχνικού μέλους πληρώματος

# Πρότυττο Ικανότητας

- 1 Κάθε ηλεκτροτεχνικός μέλος πληρώματος που υπηρετεί σε ποντοπόρο πλοίο με κύρια μηχανή πρόωσης ισχύος 750 kW ή άνω θα απαιτείται να επιδείξει την ικανότητα εκτέλεσης των καθηκόντων σε επίπεδο υποστήριξης όπως καθορίζονται στη στήλη 1 του πίνακα Α- ΙΙΙ/7.
- 2 Η ελάχιστη γνώση, κατανόηση και επάρκεια που απαιτούνται από ηλεκτροτεχνικό μέλος πληρώματος που υπηρετεί σε ποντοπόρο πλοίο με κύρια μηχανή πρόωσης ισχύος 750 kW ή άνω παρατίθεται στη στήλη 2 του πίνακα Α- ΙΙΙ/7.
- 3 Κάθε υποψήφιος για πιστοποίηση θα απαιτείται να παρέχει αποδεικτικά σταιχεία ότι έχει επιτύχει το απαιτούμενο πρότυπο ικανότητας σύμφωνα με τις μεθόδους επίδειξης και τα κριτήρια αξιολόγησης ικανότητας που καθορίζονται στις στηλες 3 και 4 του πίνακα Α- ΙΙΙ/7.

ΓΊνακας Α- ΙΙΙ/ 7
Καθορι σμός ελάχι στου προτύπου ι κανότητας για ηλεκτροτεχνι κούς μέλη πληρώματος
Λειτουργία: Μηχανολογία Ηλεκτρική, Ηλεκτρονική και συστημάτων ελέγχου σε επίπεδο υποστήριξης

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκει α	Μέθοδα επίδα ξης ι κανότητας	Κα τήα α αξ ολόγησης ι κανό- τητας
Ασφαλής χρήση ηλεκτα κού εξοπλισμού	Ασφαλής χρήση και λειτουργία ηλεκτρικού εξοπλισμού συμεριλαμβανομένου:  .1 προφυλάξεις ασφαλείας πριν από την έναρξη εργασίας ή επισκευών  .2 διαδικασίες απομόνωσης  .3 διαδικασίες έκτακτης ανάγκης  .4 διαφορεπικές τάσεις επί πλοίου  Γνώση απίων ηλεκτροπληξίας και προφυλάξεις που πρέπει να τηρούνται για την πρόληψη της	Αφολόγηση αποδεκτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρίο κατά την υπηρεσία  .2 πρακτική εκπαίδευση  .3 εξέταση  .4 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου	Κατανοεί κα ακολουθεί οδηγίες ασφαλείας ηλεκτακού εξοπλισμού και μηχανημάτων Αναγνωρίζει και αναφέρει ηλεκτρολογικούς ανδύνους και μη ασφαλή εξοπλισμό κατανοεί ασφαλείς τάσεις ηλεκτακού ρεύματος για χειροκίνητο εξοπλισμό Κατανοεί κινδύνους συναφείς με εξοπλισμό υψηλής τάσης και εργασία επί του πλοίου
Συμβολή στην παρακολού- θηση λα τουργίας ηλεκτα - κών συστημάτων και μηχα- νών	Βασική κατανόηση λειτουργίας μηχανικών μηχανολογικών συστημάτων, συμπεριλαμβανομένου:  1 κύριους κινητήρες που περιλαμβάνουν την κύρια εγκατάσταση πρόωσης  2 βοηθητικά μηχανήματα μηχανοστασίου  3 συστήματα πηδαλιουχίας  4 συστήματα καταστρώματος  6 συστήματα ξενοδοχαιακού εξοπλισμού  Βασικές γνώσες:  1 ηλεκτροτεχνολογία και θεωρία ηλεκτρικών μηχανών  2 πίνακες διανομής ηλεκτρικής ισχύσς και ηλεκτρολογικός εξοπλισμός  3 βασικά στα χεία αυτοματισμού, αυτόματα συστήματα και τεχνολογία ελέγχου  4 ενοργάνωση, συστήματα συναγερμού και παρακολούθησης  5 ηλεκτρική μετάδοση κίνησης  6 ηλεκτριστορομικά και ηλεκτριστιστιστιστήματα ελέγχου  7 ζεύξη, καταμερισμός φορπου και	Αξιολόγηση αποδακτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπαρία κατά την υπηρεσία  .2 πρακτική εκπαίδευση  .3 εξέταση  .4 εγκεκριμένη εμπαρία εκπαίδευσης επί πλοίου	Γνώση που εξασφαλίζε:  1 η λετουργία εξοπλισμού και συστήματος είναι σύμφωνη με τα εγχερίδια λετουργίας  2 τα επίπεδα απόδοσης είναι σύμφωνα με τεχνικές προδιαγραφές

Στήλη 1 Ικανότητα	Στήλη 2 Γνώση, κατανόηση και ε- πάρκει α	Στήλη 3 Μέθοδα επίδα ξης ι κανότητας	Στήλη 4 Κριτήρια αξιολόγησης ικανό- τητας
Χρήση εργαλείων χειρός, ηλεκτρικού και ηλεκτρού- κού εξόπλισμού μετρήσεων για εύρεση βλαβών, εργα- σίες συντήρησης και επι- σκευών	Απαιτήσες ασφαλείας για εργασία σε ηλεκτρικά συστήματα επί πλοίου Εφαρμογή ασφαλών εργασιακών πρακτικών Βασικές γνώσες: .1 κατασκευή και λειτουργικά χαρακτηριστικά συστημάτων και εξοπλυσμού ΑC και DC επί πλοίου .2 χρήση οργάνων μέτρησης, μηχανκών εργαλείων και εργαλείων χειρός και δυναμικής λειτουργίας	Αξ ολόγηση αποδεικτικών ατα χείων που λαμβάνονια από ένα ή περισσό τερα από τα ακόλουθα:  .1 εγκεκριμένη εκπαίδευση δεξιοτήτων εργαστηρίου  .2 εγκεκριμένη πρακτική εμπειρία και εξετάσεις	Η εφαρμογή ἄσᾶ κασιών ασφαλείας είνα ικανοπα ητική  Η επιλογή και χρήση εξοπλισμού δον- μών είναι κατάλληλη και η ερμηνεία των αποτελεσμάτων ακριβής  Η επιλογή ᾶσᾶ κασιών για την εκτέλεση επισκευών και συντήρησης είναι σύμφω νη με εγχαρίδια και καλή πρακτική

# Λειτουργία: Συντήρηση και επισκευές σε επίπεδο υποστήριξης

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκεια	Μέθοδα επίδα ξης ικανότητας	Κριτήρια αξιολόγησης ικανό- τητας
Συμβολή σε συντήρηση κα επισκευές επί πλοίου	ξκανότητα χρήσης υλκών κα εξοπλησιού λίπανσης κα καθαρισμού Γνώση ασφαλούς διάθεσης υλκών απορριμάτων Κατανόηση κατευθυντήρων οδηγών ασφαλείας κατασκευαστή και οδηγών επί πλοίου	Αξιολόγηση αποδεικτικών στα χείων που λαμβάνο- νται από ένα ή περισσό- τερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 πρακτική εκπαίδευση  .3 εξέταση  .4 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου	Οι δραστηριότητες συντήρησης εκτελού- νται σύμφωνα με τεχνικές προδιαγραφές και προδιαγραφές ασφαλείας και διαδι- κασών Η επιλογή και χρήση εξοπλιαμού και εργαλείων είναι κατάλληλη
Συμβολή στη συντήρηση κα επισκευή ηλεκτρικών συστημάτων κα μηχανημά- των επί πλοίου	Διαδικασίες ασφαλείας και έκτακτης ανάγκης  Βαα κές γνώσες ηλεκτροτεχνικών σχεδίων και ασφαλής απομόνωση εξοπλισμού και σχεπικών συστημάτων που απα τούνται προ επιτραπεί στο προσωπικό ναι εργαστεί σε τέτα α εγκατάσταση ή εξοπλισμό  Δοκιμές, εντοπισμός βλαβών και τήρηση και αποκατάσταση λειτουργίας ηλεκτρικού εξοπλισμού ελέγχου και μηχανών σε λειτουργική κατάσταση Ηλεκτρικός και ηλεκτρονικός εξοπλισμός που λειτουργεί σε εὐφλεκτες περιοχές  Βασικά στα χεία συστήματος πυρανίχευσης πλοίου	Εξέταση κα αφολόγηση αποδεκτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από το ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομαωτή, όπου απα τείτα  .4 εγκεκριμένη εκπαίδευση εξοπλισμού εργαστηρίου	Οι επιπώσες δυσλετουργών σε σχεπε συστήματα και εγκαταστάσεις αναγνωρί ζονται ακαιβώς, τα τεχνικά σχέδια του πλοίου ερμηνεύονται σωστά, τα δργανα μέτρησης και βαθμονόμησης χρησιμοπαιούνται σωστά και αι ενέργειες που εκτελούνται είναι απολογημένες  Η απομόνωση, αποσυναρμολόγηση και επανασυναρμολόγηση εγκατάστασης κι εξοπλισμού είναι σύμφωνες με τις οδηγιες ασφαλείας του κατασκευαστή και τις οδηγίες επί του πλοίου

Εκτέλεση ασφαλών διαδικασιών συντήρησης και επισκευών

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
<b>Ικανότητα</b>	Γνώση, κατανόηση κα ε- πάρκε α	Μέθοδα επίδα ξης ι κανότητας	Κριτήρια αξιολόγησης ικανό- τητας
Συμβολή στη συντήρηση κα επισκευή ηλεκτρικών συστημάτων και μηχανημά- των επί πλοίου	Ανίχνευση δυσλειτουργιών μηχανημά- των, εντοπισμός βλαβών και ενέργειες πρόληψης ζημίας		
(συνέχεια)	Συντήρηση και επισκευή εξαρτημάτων φωπισμού και συστημάτων παροχής		· 

# Λα τουργία: Έλεγχος της λα τουργίας πλοίου και μέρι μνα επιβα νόντων σε επίπεδο υποστήριξης

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
<b>Ικανότητα</b>	Γνώση, κατανόηση και ε- πάρκεια	Μέθοδα επίδα ξης ικανότητας	Κατήα α αξιολόγησης ι κανό- τητας
Συμβολή στο χειρισμό α- ποθεμάτων	Γνώση διαδικασιών ασφαλούς χεια - σμού, στα βασίας και ασφάλισης απο- θεμάτων	Αξιολόγηση αποδεικτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  1 εγκεκριμένη εμπειρία κατά την υπηρεσία  2 πρακτική εκπαίδευση  3 εξέταση  4 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου	Οι εργασίες στα βασίας αποθεμάτων εκτελούνται σύμφωνα με θεσπισμένες πρακτικές ασφαλείας και οδηγίες λατουργίας εξοπλισμού Οι χαιριαμός επικίνδυνων, οχληρών και επιβλαβών αποθεμάτων συμμορφώνεται με θεσπισμένες πρακτικές ασφαλείας Οι επικαινωνίες στον τομέα ευθύνης του χαιριστή είναι σταθερά επιτυχείς
Εφαρμογή προφυλάξεων κα συμβολή στη πρόληψη ρύπανσης του θαλασσίου περιβάλλοντος	Γνώση προφυλάξεων που πρέπε να λαμβάνοντα για την πρόληψη ρύπανσης του θαλάσα ου περιβάλλοντος Γνώση χρήσης κα λειτουργίας ανπρουπαντικού εξοπλισμού/ στα χείων Γνώση εγκεκριμένων μεθόδων ἄάθεσης βαλάσα ων ρύπων	Αξιολόγηση αποδεικτικών στα χείων που λαμβάνοντα από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπειρία κατά την υπηρεσία  .2 πρακτική εκπαίδευση  .3 εξέταση  .4 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου	Ο δαδικασίες που έχουν σχεδιασθεί για τη διαφύλαξη του θαλάσσιου περιβάλλο- ντος προύνται πάντοτε
Εφαρμογή ἄαἄ κασών εργασιακής υγεινής και ασφάλειας	Εργασιακή γνώση ασφαλών εργασιακών πρακτικών κα προσωπικής ασφάλειας επί πλοίου, συμπεριλαμβανομένου:  .1 ηλεκτρική ασφάλεια .2 αδρανοποίηση/ αποσύνδεση .3 μηχανική ασφάλεια .4 άδεια εργασίας σε συστήματα .5 εργασία σε ύψος .6 εργασία σε κλειατούς χώρους .7 τεχνικές ανύμωσης και μέθοδα	Αξολόγηση αποδεκτικών στα χείων που λαμβάνοντα από ένα ή περ ασότερα από τα ακόλουθα:  .1 εγκεκριμένη εμπερία κατά την υπηρεσία  .2 πρακτική εκπαίδευση  .3 εξέταση  .4 εγκεκριμένη εμπερία εκπαίδευσης επικοίδευσης επί πλοίου	Οι διαδικασίες που έχουν σχεδιασθεί για την προστασία προσωπικού και πλοίου τηρούνται πάντοτε Τηρούνται πάντοτε ασφαλείς εργασιακές πρακτικές και ο προστατευτικός εξοπλομός χρησιμοπαιείται πάντοτε σωστά.
	.7 τεχνικές ανύψωσης και μέθοδα πρόληψης τραυματισμών στη πλάτη		

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκει α	Μέθοδα επίδα ξης ι κανότητας	Κριτήρια αξιολόγησης ι κανό- τητας
Εφαρμογή διαδικασιών εργασιακής υγείας και α-	.8 ασφάλεια από χημικούς και βιολο- γικούς ιανδύνους		
σφάλειας (συνέχεια)	9 προσωπικός εξοπλισμός ασφαλείας		

#### ΚΕΦΑΛΑΙΟ ΙΥ

## Πρότυπα που αφορούν χα ριστές ραδιοεπικα νωνιών

Τμήμα A - IV/1 Εφαρμογή

(Δεν υπάρχουν διατάξεις)

Τμήμα Α - ΙV/2

Υποχρεωτικές ελάχιστες απαιτήσεις πιστοποίησης χειριστών ραδιοεπικοινωνιών Παγκοσμίου Ναυτιλιακού Συστήματος Κινδύνου και Ασφάλειας (GMDSS)

## Πρότυποικανότητας

- 1 Η ελάχιστη γνώση, κατανόηση και επάρκεια που απαιτείται για πιστοποίηση χειριστών ραδιοεπικανωνιών GMDSS θα είναι επαρκείς ώστε να είναι σε θέση οι χειριστές να εκτελούν καθήκοντα ραδιοεπικανωνιών. Οι γνώσεις που απαιτούνται για να αποκτηθεί κάθε τύπος πιστοποιητικού που ορίζεται στους Κανονισμούς Ραδιοεπικανωνιών θα είναι σύμφωνες με εκείνους τους κανονισμούς. Επιπρόσθεται κάθε υποψήφιος για πιστοποίηση θα απαιτείται να επιδείξει ικανότητα να αναλάβει τις εργασίες, καθήκονται και ευθύνες που παρατίθενται στην στήλη 1 του πίνακα Α-Ι-Ι//2.
- 2 Οι γνώσεις, κατανόηση και επάρκεια για θεώρηση, σύμφωνα με την Σύμβαση, πιστοπαιητικών που εκδίδονται σύμφωνα με τις διατάξεις των Κανονισμών Ραδιοεπικοινωνιών παρατίθενται στην στήλη 2 του πίνακα Α IV/2.
- 3 Το επίπεδο γνώσεων των θεμάτων που παρατίθενται στον πίνακα Α-ΙV/2 θα είναι επαρκές προκειμένου ο υποψήφιος να είναι σε θέση να εκτελεί τα καθήκοντά του\*.
- 4 Κάθε υποψήφιος θα παρέχει αποδεικτικά στοιχεία ότι έχει επιτύχει το απαιτούμενο πρότυπο ικανότητας με:
  - .1 επίδειξη ικανότητας εκτέλεσης των εργασιών και καθηκόντων και ανάληψης ευθυνών που παρατίθενται στην στήλη 1 του πίνακα Α -IV/2, σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που παρατίθενται στις στήλες 3 και 4 αυτού του πίνακα, και
  - .2 εξέταση ή συνεχή αξιολόγηση ως μέρος εγκεκριμένης εκπαίδευσης που βασίζεται στην ύλη που παρατίθεται στην στήλη 2 του πίνακα Α ΙV/2.

Ο, σχεπκές πρότυπες σερές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταμασία των εκπαιδεύσεων

Πίνακας Α-ΙV/2 Καθορισμός ελάχιστου προτύπου ι κανότητας για χειριστές ραδιοεπικα νωνιών GMDSS

Λα τουργία: Ραδιοεπικα νωνίες σε επιχα ρησιακό επίπεδο

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα ε- πάρκα α	Μέθοδα επίδα ξης ι κανότητας	Κριτήρια αξιολόγησης ικανό- τητας
Εκπομπή κα λήψη πληροφορών με χρήση υποσυστημάτων κα εξοπλομος και εκπλήρωση των λει τουργικών απαιήσεων GMDSS	Επιπλέον των απατήσεων των Κανονσμών Ραδισεπικανωνιών, γνώση:  1 ραδισεπικανωνιών ερεύνης και διάσωσης συμπεριλαμβανομένων των Αερναυπικής και Θαλάσσιας Ερευνας και Διάσωσης (ΙΑΜSΑR)  2 μέσων πρόληψης εκπομπής εσφαλμένων συναγερμών ανδύνου και διάσκασών μείωσης των επιπτώσεων είτα ων συναγερμών  3 αυστημάτων αναφοράς πλαίου  4 ιστρικών ραδιουπηρεσιών  5 χρήση του Διεθνούς Κώδικα Σημάπων και των Πρότυπων Φράσεων Ναυπικών Επικανωνιών του Ι.Μ.Ο.  6 Αγγλικής γλώσσας γραπτής και προφοριών που είναι σχετικές με την ασφάλα της ζωής στη θάλασσα  ΣΗΜΕΙΩΣΗ: Αυτή η απαίτηση μπορείνα μαώνεται στην περίπτωση του Περιορισμένου Πιστοποιητικού Χαριστού Ραδιοεπικανωνιών	Εξέταση κα αξιολόγηση αποδεικτικών στα χείων που λαμβάνοντα από πρακτική επίδε ξη λειταρμοπαώντας:  1 εγκεκα μένο εξοπλισμό  2 προσομα ωτή επικανωνιών GMDSS, όπου απα τείτα*  3 εξοπλισμό εργαστηρίου ραδιοεπικα νωνιών	Η εκπομπή κα λήψη επικανωνών είναι σύμφωνη με δεθνείς κανονισμούς κα διακασίες και εκπελούνται αποδοπκά και αποτελεσματικά  Μηνύματα στην Αγγλική σχεπικά με την ασφάλεια (safety) του πλοίου, ασφάλεια (security) και των επιβαινόντων και την προστασία του θαλάσσιου περιβάλλοντο διαχειρίζονται σωστά
Παροχή υπηρεσιών ραδιο- ετι κα νωνιών σε έκτακτή ανάγκη	Η παροχή υπηρεσιών ραδιοεπικανωνών σε έκτακτη ανάγκη όπως:  .1 εγκατάλειψη πλοίου  .2 πυρκαγία ότο πλοίο  .3 μερική ή ολική βλάβη των εγκαταστάσεων ραδιοεπικανωνών Γιροληπτικά μέτρα για την ασφάλεια του πλοίου και του προσωπικού σε	Εξέταση και αξιολόγηση αποδεικτικών στα χείων που λαμβάνονται από πρακτική επίδει ξη λειτουργικών διαδικασιών με χρήση  .1 εγκεκα μένου εξοπλαμού  .2 προσομα ωτή επικανωμών GMDSS όπου	Η ανταπόκαση πραγματοπαείτα αποδ πκά και αποτελεσμαπκά
	συσχέπση με τους κνδύνους που σχεπζοντα με τον εξοπλισμό ραδιο- συσκευών, περιλαμβανομένων των ηλεκτρικών και μήτονίζουσας ακπνο- βολίας κινδύνων	απα τείτα * ,3 εξοπλισμού εργαστηρί ου ραά σεπικα νωνιών	-

#### ΚΕΦΑΛΑΙΟ Υ

# Πρότυπα για απα τήσεις ει ακής εκπαίδευσης προσωπικού που υπηρετεί σε συγκεκριμένους τύπους πλοίων

## Τμήμα Α-۷/1-1

Υποχρεωτικές ελάχιστες απαιτήσεις για την εκπαίδευση και τα προσόντα πλοιάρχων, αξιωματικών και μελών πληρώματος σε πετρελαιοφόρα και χημικά δεξαμενόπλοια

## Πρότυποι κανότητας

- 1 Κάθε υποψήφιος για πιστοποίηση σε βασική εκπαίδευση για εργασίες φορτίου σε πετρελαιοφόρα και χημικά δεξαμενόπλοια θα απαιτείται να:
  - .1 επιδεικνύει την ικανότητα να αναλάβει τις εργασίες, καθήκοντα και ευθύνες που παρατίθενται στη στήλη 1 του πίνακα Α-V/1-1, και
  - .2 παρέχει σταιχεία ότι έχει επιτύχει: .3
    - .2.1 την ελάχιστη γνώση, κατανόηση και επάρκεια που παρατίθεται στη στήλη 2 του πίνακα Α- V/1-1-1, και
    - .2.2 το απαιτούμενο πρότυπο ικανότητας σύμφωνα με τις μεθόδους για επίδειξη ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που αναφέρονται στις στήλες 3 και 4 του πίνακα Α-V/1-1-1.
- 2 Κάθε υποψήφιος για πιστοποίηση προχωρημένης εκπαίδευσης για εργασίες φορτίου πετρελαιοφόρων θα απαιτείται να:
  - .1 επιδεικνύει την ικανότητα να αναλάβει τις εργασίες, καθήκοντα και ευθύνες που παρατίθενται στη στήλη 1 του πίνακα Α-V/1-1-2, και
  - .2 παρέχει αποδεικτικά σταιχεία ότι έχει επιτύχει:
    - .2.1 την ελάχιστη γνώση, κατανόηση και επάρκεια που παρατίθενται στη στήλη 2 του πίνακα Α-V/1-1-2, και
    - .2.2 το απαιτούμενο πρότυπο ικανότητας σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που αναφέρονται στις στήλες 3 και 4 του πίνακα Α-V/1-1-2.
- 3 Κάθε υποψήφιος για πιστοποίηση προχωρημένης εκπαίδευσης για εργασίες φορτίου χημικών δεξαμενοπλοίων θα απατείτα να:
  - .1 επίδεικνύει την ικανότητα ανάληψης των εργασιών, καθηκόντων και ευθυνών που παρατίθενται στη στήλη 1 του πίνακα Α-V/1-1-3,
  - .2 παρέχει αποδεικτικά στοιχεία ότι ότι έχει επιτύχει:
    - .2.1 την ελάχιστη γνώση, κατανόηση και επάρκεια που παρατίθεται στη στήλη 2 του πίνακα Α-V/1-1-3, και
    - 2.2. το απαιτούμενο πρότυπο ικανότητας σύμφωνα με τις μεθόδους για επίδειξη ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που αναφέρονται στις στήλες 3 και 4 του πίνακα Α-V/1-1-3.

Πίνακας Α-V/1-1-1
Καθορισμός ελάχι στων προτύπων ι κανότητας στη βασική εκπαίδευση για εργασίες φορτίου σε πετρελα οφόρα και χημικά δεξαμενόπλα α

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκει α	Μέθοδα επίδα ξης ι κανότητας	Κα τήρια αξιολόγησης ικανό- τητας
Συνα σφορά στις ασφαλείς εργασίες φορήου και χημικών	Βαακή γνώση δεξαμενοπλοίων:  1 τύπα πετρελα οφόρων κα χημ- κών δεξαμενοπλοίων  2 γενική ρύθμιση και κατασκευή Βασική γνώση εργασιών φορτίου:  1 συστήματα σωληνώσεων και βαλβίδων  2 αντλίες φορτίου  3 φόρτωση και εκφόρτωση  4 καθαρισμός δεξαμενών, καθαρσμός, ελευθέρωση αερίων και ασδράνεια Βασική γνώση φυσικών ιδιστήτων πετρελα οφόρων και χημικών δεξαμενοπλοίων:  1 πίεση και θερμοκρασία, περιλαμβανομένης πίεσης στιμού/ θερμοκρασία συνάφειας  2 τύπα παραγωγής ηλεκτροστατικού φορτίου  3 χημικά σύμβολα Γνώση και κατανόηση αγωγής ασφάλειας δεξαμενοπλοίου και δισσφάλειας σεξαμενοπλοίου και δισσφάλειας δεξαμενοπλοίου και δισσφάλειας διεξαμενοπλοίου και δισσφάλειας δισσφάλει	Εξέταση κα αξιολόγηση αποδακτικών στα χείων που αποκτώντα από ένα ή περασότερα από τα ακόλουθα:  1 εγκεκριμένη υπηρεσία σε πλοίο  2 εγκεκριμένη εμπαρία εκπαίδευσης επί πλοίου  3 εγκεκριμένη εκπαίδευση σε προσομα ωτή  4 εγκεκριμένο εκπαιδευτικό πρόγραμμα	Ο επικανωνίες στα πλαίσια αρμοδιότητας είναι σαφείς και αποτελεσματικές Ο εργασίες φορτίου διεξάγονται σύμφωνα με τις αποδεκτές αρχές και διαδικασίες εξεσφάλισης της ασφάλειας εργασιών
Λήψη μέτρων προφύλαξης για την αποφυγή κινδύνων	χείρ ση ασφάλειας  Βασική γνώση των κινδύνων που έχουν αχέση με εργασίες δεξαμενοπλοίου, συμπεριλαμβανομένων:  1. κινδύνων υγείας  2. περιβαλλοντικών κινδύνων  3. κινδύνων αντίδρασης  4. κινδύνων ἄάβρωσης  5. κινδύνων έκρηξης και αναφλεφμότητας  6. πηγών ανάφλεξης, συμπεριλαμβανομένων ηλεκτροστατικών κινδύνων  7 κινδύνων τοξικότητας  8. ἄαρροών στμού και νεφών	Εξέταση και αξιολόγηση αποδεικτικών στα χείων που αποκτώνται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκαιμένη υπηρεσία σε πλοίο  .2 εγκεκαιμένη εμπαιρία εκπαίδευσης επί πλοίου  .3 εγκεκαιμένη εκπαίδευση σε προσομαιώτη  .4 εγκεκαιμένο εκπαιδευτικό πρόγραμμα	κή  κασωπικό, και λήψη καταλλήνων με- τρων σύμφωνα με τις θεσπισμένες α αδ κασίες  Η αναγνώριση και α ενέργιες επίγνωσ επικίνδυνης κατάστασης σύμμορφώνο- νται με τις θεσπισμένες ασάκασίες, ευ- τροσωπικό, και λήψη καλύτερη πρακ κή

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκει α	Μέθοδα επίδα ξηςι- κανότητας	Κα τήα α αξιολόγησης ικα- νότητας
Λήψη μέτρων προφύλα- ξης για την αποφυγή κν- δύνων (συνέχεια)	Βασική γνώση ελέγχων κινδύνου: .1 αδράνεια, πλήρωση ύδατος, στεγνωτικά και τεχνικές παρακολούθησης .2. μέτρα αντιστατικά		
	.3 εξαερισμός .4 χωρισμός .5 παρεμπόδιση φορτίου .6 απουδαιότητα συμβατότητας φορτίου .7 ατμοαφαιρικός έλεγχος .8 δοκιμή αερίου Κατανόηση πληροφοριών Φύλλου Δεδομένων Υλικών Ασφάλσιας (MSDS)		
Εφαρμογή επαγγελμαπ- κής υγείας και προφυλά- ξεων ασφάλειας και μέ- τρων	Λετουργία και κατάλληλη χρήση οργάνων υπολογισμού αερίου και σχεπκός εξοπλισμός Κατάλληλη χρήση εξοπλισμού ασφάλειας και προστατευπκών συσκευών, συμπεριλαμβάνοντας:  1. αναπνευσπική συσκευή και εξοπλισμός εκκένωσης δεξαμενής  2. προστατευπκή ένδυση και εξοπλισμός  3. μέσα επαναφοράς  4. εξοπλισμός διάσωσης και διαφυγής Βασική γνώση ασφαλών πρακτικών εργασίας και διαδικασίες σύμφωναι με τη νομοθεσία και πις κατευθυντήρες οδηγίες της βιομηχανίας και ατομική ασφάλεια επί του πλοίου σχεπικά με πετρελαιοφόρα και χημικά δεξαμενόπλαια, συμπεριλαμβανομένου:  1. λήψη μέτρων πρόληψης κατά την είσοδο σε κλειστούς χώρους  2. λήψη μέτρων πρόληψης τη νικαι κατά τη διάρκεια εργασιών επισκευών και συντήρησης  3. μέτραι ασφάλεια και θερμές και ψυχρές εργασίες  4. ηλεκτρική ασφάλεια  5. κατάλογος ελέγχου πλοίου / ξηράς	Εξέταση και αξιολόγηση αποδεκτικών στα χείων που αποκιώνται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη υπηρεσία σε πλοίο  .2 εγκεκριμένη εμπαρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομαιωτή  .4 εγκεκριμένο εκπαίδευτικό πρόγραμμα	Διαδικασίες ασόδου σε κλαστόυς χώρους προύνται Διαδικασίες και πρακτικές ασφαλούς εργασίας σχεδιασμένες για τη διασφάλιση προσωπικού και πλοίου προύνται συνέχεια Κατάλληλος εξοπλισμός προστασίας και ασφάλιας χρησιμοπαείται ορθώς
	Βασική γνώση πρώτων βοηθείων με αναφορά Φύλλου Δεδομένων Υλικών Ασφάλειας (MSDS)		Κανόνες Πρώτων βοηθειών

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδαξης ι κανότητας	Κατήα α αξιολόγησης ι κανό- τητας
Διεξαγωγή εργασιών πυ- ρόσβεσης	Οργάνωση ανταπόκραης σε περίπωση πυρκαγιάς σε δεξαμενόπωση ανταπόκραης σε περίπωση πυρκαγιάς σε δεξαμενόπλαο και μέτρα που πρέπα να ληφθούν Κίνδυναι πυρκαγιάς που έχουν σχέση με τη διαχείριση φορτίου και τη μεταφορά επικίνδυνων και επικαγιών πετρελαίου και χημικών Λατουργίες σταθερού συστήματος αφρού πυρόσβεσης Λατουργίες σταθερού συστήματος αφρού πυρόσβεσης Αυαχαίπση υπερχείλισης σε σχέση με τις εργασίες πυρόσβεσης	Πρακτικές ασκήσεις και οδηγίες που ἄεξάγονται υπό εγκεκα μένες και πραγματικά ρεαλιατικές συνθήκες εκπαιδευσης (π.χ. συνθήκες προσομοίωσης πλοίου) και όποτε είναι δυνατό και πρακτικό, σε συνθήκες σκότους	Αρχικές και επακάλουθες ενέργειες επίγνωσης πυρκαγιάς στο πλοίο συμμορφώνονται με τις θεσπισμένες πρακτικές και διαδικασίες Τα μέτρα που λαμβάνονται για την αναγνώριση σήματος κλήσης είναι τα κατάλληλα με την ενδιε κνυόμενη έκτακτη ανάγκη και συμμορφώνονται με τις θεσπισμένες διαδικασίες Ένδυση και εξοπλισμός είναι κατάλληλα με τη φύση των εργασιών πυρόσβεσης Ο συγχρονισμός και η ακολουθία ατομκών πράξεων είναι κατάλληλα με τις υφιστάμενες περιπτώσιες και συνθήκες Η πυρόσβεση επιτυγχάνεται με την χρήση κατάλληλων διαδικασιών, τεχνικών και μέσων πυρόσβεσης
Ανταπόκριση σε έκτακτες ανάγκες	Βασική γνώση διαδικασιών έκτα- κτης ανάγκης, συμπεριλαμβανομέ- νων διαδικασιών διακοπής λει τουρ- γίας έκτακτης ανάγκης	Εξέταση και αξιολόγηση αποδεικτικών στα χείων που αποκτώνται από ένα ή περισσότερα από τα ακό- λουθα:	Ο τύπος και η επίπτωση της έκτακτης ανάγκης αναγνωρίζεται ορθώς και α ενέργειες ανταπόκρισης συμμορφώνοντα με τις διαδικασίες έκτακτης ανάγκης και τα σχέδια αναγκών
•		.1 εγκεκα μένη υπηρεσία σε πλοία	
		.2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου	
		.3 εγκεκριμένη εκπαίδευση σε προσομαιωπή	
		.4 εγκεκριμένο εκπαιδευτικό πρόγραμμα	
Λήψη -μέτρων προφύλαξης για την πρόληψη ρύπανσης περ βάλλοντος από την απελευθέρωση πετρελαιο- ειδών ή χημικών	Βασική-γνώση των επιπτώσεων πετρελαϊκής και χημικής ρύπανσης ζωή	Εξέταση κα αξολόγηση αποδεκτικών στα χείων που αποκτώντα από ένα ή περισσότερα από τα ακό- λουθα:	Διαδικασίες που είναι σχεδιασμένες για την προφύλαξη του περιβάλλοντος τη- ρούνται συνέχεια
A SOL OF WIDE	Βασική γνώση ι ασακασιών πλοίου για πρόληψη ρύπανσης	.1 εγκεκριμένη υπηρεσία σε πλοίο	
	Βασική γνώση μέτρων που λαμβά- νοντα σε περίπτωση υπερχείλι- σης, συμπερ λαμβανομένης της ανάγκης:	.2 εγκεκριμένη ερπάριου	
	.1 αναφοράς σχεπκών πληροφο- ρών στα αρμόδα άτομα	σε προσομαωτή .3 εγκεκριμένη εκπαίδευση	
	.2 την υποστήαξη εφαρμογής δια- δικασιών αναχαίπσης υπερχείλισης	.4 εγκεκρ μένο εκπα δευπκό πρόγραμμα	

Πίνακας Α-V/1-1-2 Καθορισμός ελάχιστων προτύπων ικανότητας στη προχωρημένη εκπαίδευση για εργασίες φορτίου σε πετρελα οφόρα και χημικά δεξαμενόπλα α

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ικανότητας	Κα τήα α αξιολόγησης ι κανό- τητας
Ικανότητα ασφαλούς εκτέ- λεσης κα παρακολούθησης όλων των εργασιών φορτί- ου	Σχεδιασμός και χαρακτηριστικά ενός πετρελαιοφόρου  Γνώση σχεδίου, συστημάτων και εξοπλισμού πετρελαι αφόρων, συμπεριλαιρών και κατασκευή  .2 διάταξη αντλιών και εξοπλισμός  .3 διάταξη δεξαμενής, σύστημα αντλιών και ρυθμίσεις εξαερισμού δεξαμενής  .4 συστήματα μέτρησης χωρητικότητας δεξαμενής και συναγεροί  .5. συστήματα θέρμανσης φορτίου  .6 καθαρισμός δεξαμενής, ελευθέρωση αερίων και συστήματα αδράνεις  .7 σύστημα ερματισμού  .8 εξαέρωση περιοχής φορτίου και εξαερισμός χώρου ενδιαίτησης  .9 ρυθμίσεις καταλοίπων  .10 συστήματα επανάκτησης ατμού  .11 σύστημα ηλεκτρικού και ηλεκτρικού ελέγχου φορτίου  .12 εξοπλισμός προστασίας περιβάλλοντος συμπεριλαμβανομένου Εξοπλισμού Παρακολούθησης Εκφόρτωσης (ΟΟΜΕ)  .13 επίστρωση δεξαμενής και συστήματα ελέγχου πίεσης	Εξέταση και αξιολόγηση αποδεικτώνται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη υπηρεσία σε πλοίο  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομαιωτή  .4 εγκεκριμένο εκπαιδευτικό πρόγραμμα	Οι επικανωνίες είναι σαφείς, κατανοητές και επιτυχείς Οι εργασίες φορτίου διεξάγονται με ασφαλή τρόπο, λαμβάνοντας υπόψη τα σχέδα πετρελαιοφόρου το συστήματα και τον εξοπλισμό Οι εργασίες φορτίου σχεδιάζονται, ο κίνδυνος διαχειρίζεται και διεξάγεται σύμφωνα με πις αποδεκτές αρχές και διαδικασίες για την εξασφάλιση ασφάλισης εργασιών και αποφυγής ρύπανσης θαλασσίου περιβάλλοντος Πιθανή μη συμμόρφωση με διαδικασίες που έχουν σχέση με πις εργασίες φορτίου αναγνωρίζονται κατάλληλα και αποκαθίστανται Ορθή φόρτωση, στα βασία και εκφόρτωση φορτίων εξασφαλίζαι ότι η ευστάθεια και αι συνθήκες πίεσης παραμένουν σται ασφαλή όρια διαρκώς Μέτρα που λαμβάνονται και διαδικασίες που ακολουθούνται εφαρμάζονται ορθώς και χρησιμοπταιείται ορθώς ο εξοπλισμός που έχει σχέση με το φορτίοι συμμορφώνονται με πις λειτουργικές πρακτικές και διαδικασίες Διαδικασίες παρακολούθησης και τα συστήμαται ασφαλείας εξασφαλίζουν ότι όλαι αι συναγερμοί ανιχνεύονται κατάλληλα και δρούν σύμφωναι με πις θεσπισμένες διαδικασίες έκτακτης ανάγκης

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ι κανότητας	Κριτήρια αξιολόγησης ι κανό- τητας
Ικανότητα ασφαλούς εκτέ- λεσης και παρακολούθησης όλων των εργασιών φορτί- ου <i>(συνέχαια</i> ι)	Γνώση θεωρίας αντλών και χαρα- κτης στικά, συμπεςι λαμβανομένων των τύπων αντλών φορτίου και ασφαλής λατουργίας τους		
	τος ασφαλούς διαχείρισης μενοπλοίου και εφαρμογή αυστήμα- τος ασφαλούς διαχείρισης		
	Γνώση κα κατανόηση παρακολού- θησης των αυστημάτων ασφάλειας, συμπεριλαμβανομένης διακοπής έκτακτης ανάγκης	·	
	φόρτωση , εκφόρτωση , φροντίδα κα χειρισμός φορτίου		
	Ικανότητα εκτέλεσης μέτρησης φορ-		
	Γνώση επίπτωσης φορτίων υγρών χύδην σε στα βασία, ευστάθεα κα δομική ακερα ότητα		
	Γνώση κα κατανόηση εργασιών που έχουν σχέση με φορτίο πετρελαίου, συμπεριλανμβανομένης:		
	1, σχέᾶα φόρτωσης και εκφόρτω- σης		
•	2. ερμαπσμός και απομάκρυνση έρματος		
	3. εργασίες καθαρισμού δεξαμενής		
	4. αδράνεια		
	5. απελευθέρωση αερίου		
	6. μεταγγίσεις από πλοίο σε πλοίο		·
	7. φόρτωση έως την κορυφή		
	8. πλύση αργού πετρελαίου		
·	Ανάπτυξη και εφαρμογή σχεδίων εργασιών φορτίου, διδικασιών και καταλόγων ελέγχου		
	Βαθμονόμηση κα χρήση συστημά- των παρακολούθησης κα ανίχνευ- σης αερίου, των οργάνων κα του εξοπλισμού		
·	Ικανότητα ἄ αχείρισης και επίβλε- ψης προσωπικού με ευθύνες που αφορούν το φορπο		Πνετα ανάθεση καθηκόντων στο προ σωπικό και ενημερώνεται για πις δια κασίες και τα πρότυπα εργασίας που πρέπει να ακολυθούνται με τρόπο και φωνα με πις ασφαλείς επιχειρησιακές πρακτικές

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
. Ικανότητα	Γνώση, κατανόηση κα επτάρκε α	Μέθοδα επίδα ξης ικανότητας	Κριτήρια αξιολόγησης ικανό- τητας
Εξακείωση με τα φυακά κα χημκά χαρακτηριστικά των πετρελαιοειδών φορτί- ων	Γνώση και κατανόηση των φυσικών και χημικών ιδιοτήτων των πετρελαιοεδών φορτίων Κατανόηση των πληροφοριών που περιέχονται στο Φύλλο Δεδομένων Υλικού Ασφάλειας (MSDS)	Εξέταση και αξιολόγηση αποδα κτικών στα χείων που αποκτώνται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη υπηρεσία σε πλοίο  .2 εγκεκριμένη εμπαιρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομαιωτή  .4 εγκεκριμένο εκπαιδευτικό πρόγραμμα	Η αποτελεσματική χρήση επιτυγχάνετα από τις πηγές πληροφόρησης για ανα- γνώριση ιδιοτήτων και χαρακτηριατικών πετρελαιοιαδών φορτίων και σχετικών αερίων, και η επίπτωσή τους στην ασφά- λια, στο περιβάλλον και στη λια τουργία του πλοίου
Λήψη μέτρων προφύλα- ξης για την αποφυγή κιν- δύνων	Γνώση και κατανόηση των κνδύνων και των μέτρων ελέγχου σχεπκά με εργασίες φορτίου πετραλαιοφόρων, συμπεριλαμβανομένης:  .1 τοξικότητα  .2 αναφλεξιμότητα και έκρηξη  .3 κίνδυναι υγείας  .4 σύσταση αδρανούς αερίου  .5 ηλεκτροσταπκοί κίνδυνα Γνώση και κατανόηση των κινδύνων της μη συμμά ρφωσης με σχεπικούς κανόνες/ κανονισμούς	Εξέταση κα αξιολογηση αποδεικτικών στα χείων που αποκτώνται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη υπηρεσία σε πλοίο  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομα ωτή  .4 εγκεκριμένο εκπαιδευτικό πρόγραμμα	Κίνδυνα σχετικοί με το φορτίο στο πλοίο κα στο προσωπικό το οποίο σχετικίζετα με εργασίες φορτίου πετρελα οφόρου, αναγνωρίζονται κατάλληλα κα λαμβάνονται κατάλληλα μέτρα ελέγχου
Εφαρμογή επαγγελμαπκής υγιενής και προφυλάξεις ασφάλειας	Γνώση και κατανόηση των ασφαλών εργασιακών πρακτικών, συμπεριλαμβανομένης, αξιολόγησης κινδύνου και προσωπικής ασφάλειας επή πλοίου, σχετικά με τα πετρελαιοφόρα:  1 Μέτρα προφύλαξης να λαμβάνονται κατά την είσοδο σε κλειστούς χώρους, συμπεριλαμβανομένης ορθής χρήσης διάφορων τύπων αναπνευστικών συσκευών  2 μέτρα προφύλαξης που λαμβάνονται πριν και κατά τη διάρκεια εργασιών επισκευών και συντήρησης  3 μέτρα προφύλαξης για θερμές και ψυχρές εργασίες  4 μέτρα προφύλοξης για ηλεκτρική ασφάλεια	Εξέταση και αξιολόγηση αποδεικεικών στα χείων που αποκτώνται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη υπηρεσία σε πλοίο  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομαιώτή  .4 εγκεκριμένο εκπαίδευτικό πρόγραμμα	Διαδικασίες που είναι σχεδιασμένες για την προστασία προσωπικού και του πλοίου τηρούνται διαρκώς Πρακτικές ασφαλούς εργασίας και κατάλληλος προστατευτικός εξοπλισμός ασφάλασς χρησιμοπαιείται ορθώς Πρακτικές εργασίας είναι σύμφωνες με τις νομοθετικές απαιτήσεις, τους κώδικες πρακτικής, τις άδειες εργασίας και τις περιβαλλοντικές ανησυχίες Ορθή χρήση αναπνευστικών συσκευών Διαδικασίες για είσοδο σε κλειστούς χώρους τηρούνται

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ι κανότητας	Κα τήα α αξ ολόγησης ι κανό- τητας
Ανταπόκριση σε έκτακτες ανάγκες Λήψη μέτρων προφύλαξης για την πρόληψη ρύπανσης	ATTENTO CHÁNKAC TELOENO OMÓDIAV.	Εξέταση και αξιολόγηση αποδεκτικών στα χείων που αποκτώνται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη υπηρεσία σε πλοίο  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομα ωτή  .4 εγκεκριμένο εκπαιδευπικό πρόγραμμα  Εξέταση και αξιολόγηση αποδεκτικών στα χείων που αποκτώνται από ένα ή	Ο τύπος και η επίπτωση έκτακτης ανάγκης αναγνωρίζεται κατάλληλα και α ενέργαιες ανταπόκρισης συμμορφώνονται με τις θεσπισμένες διαδικασίες και τα σχέδια ανάγκης  Η σαρά προτεραιότητας, και τα επίπεδαι και τα χρονοδιαγράμματα σύνταξης αναφορών και ενημέρωσης προσωπικού επί πλοίου είναι αχεπικές με τη φύση της έκτακτης ανάγκης και αντανακλούν το επείγον του προβλήματος  Εκκένωση, διακοπή έκτακτης ανάγκης και διαδικασίες απομόνωσης είναι κατάλληλες με τη φύση της έκτακτης ανάγκης και εφαρμόζονται σωστά  Η αναγνώριση καθώς και τα μέτρα που λαμβάνονται σε περίπτωση ιστρικής εφαρμόζονται σωστά  Ο εργασίες διαξάγονται σύμφωναι με τις αποδεκτές αρχές και διαδικασίες πρόλημης ρύπανσης περιβάλλοντος
περ βάλλοντος		περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη υπηρεσία σε πλοίο  .2 εγκεκριμένη εμπαιρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομα ωτή  .4 εγκεκριμένο εκπαιδευτικό πρόγραμμα	Ο να απιός φορτίων συμυορφώνετα
Παρακολούθηση και έλεγ- χος σε συμμόρφωση με πς	Γνώση κα κατανόηση των αχεπκών ἄατάξεων της Διεθνούς Σύμβασης για την Πρόληψη Ρύπανσης από Πλοία (MARPOL), όπως τροπο- παήθηκε, κα άλλα σχεπκά όργανα του ΙΜΟ, κατευθυντήριες οδηγίες της βιομηχανίας και κανονισμοί λθιμένων όπως εφαρμόζονται κατά γενικό κανόνα	Εξέταση και αφολογηση αποδε κτικών στα χείων ποι απο ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη υπηρεσία στι πλοίο  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομαιωτή  .4 εγκεκριμένο εκπαίδευτικ πρόγραμμα	τα σχετικά όργανα του ΙΜΟ και τα θεσπι σμένα βιομηχανικά πρότυπα και κώδικε πρακτικής ασφαλούς εργασίας

Πίνακας Α-V/1-1-3 Καθορισμός ελάχιστου προτύπουι κανότητας προχωρημένης εκπαίδευσης για εργασίες φορτίου σε χημικά δεξαμενόπλα α

Κανότητα   Γνώση, κατανόηση κα επάρκα α   Κανότητα   Κανότητα   Κανότητα   Εξέπαση κα αξολώ λεσης και παρακολούθησης   Αμπκού δεξαμενοπλοίου   Γνώση σχεδίων χημικών δεξαμενοπλοίου   Γνώση σχεδίων χημικών δεξαμενοπλοίου   1.1 γενικές δατάξας και κατασκευή   2.2 δατάξας σωληνώσεων και εξοπλισμός   3.3 κατασκευή δεξαμενής και ρυθμίσας   4.4 αντλίες και συστήματα στράγησοι και συστήματα στράγησοι και συστήματα ελέγχου θερμοκρασίας και συναγερμοί   6.6 συστήματα αλέγχου μέτρησης και συναγερμοί   7.7 συστήματα αλέγχου μέτρησης και συναγερμοί   7.7 συστήματα αλέγχου μέτρησης και συναγερμοί   9.9 συστήματα αλέγχου μέτρησης και φύξης φορτίου   9.9 συστήματα περιβαλλονικού ελέγχου δεξομενής φορτίου   1.1 συστήματα περιβαλλονικού ελέγχου δεξομενής φορτίου   1.1 συστήματα εμπαροφής/ ανάκτησης στιρού   1.1 συστήματα επατοροφής/ ανάκτησης στιρού   1.1 συστήματα επατοροφής/ ανάκτησης στιρού   1.1 συστήματα επατοροφής/ ανάκτησης στιρού   1.1 συστήματα πυρόσβεσης   1.1 συστήματα πυρόσβεσης	3 Στήλη 4
λεσης και παρακολούθησης δλων των εργασιών φορτίου  Γνώση σχεδίων χημικών δεξαμενοπλοίου Γνώση σχεδίων χημικών δεξαμενοπλοίου Τνώση σχεδίων χημικών δεξαμενοπλοίου Τνώση σχεδίων χημικών δεξαμενοπλοίου Τνώση σχεδίων χημικών δεξαμενοπλούου  Τνώση σχεδίων χημικών δεξαμενοπλούου  Τνώση σχεδίων χημικών δεξαμενοπλούου  Τεγκεκριμένη υπης πλούο  2 ἀστάξεις σωληνώσεων και εξοπλασός  3 κατασκευή δεξαμενής και ρυθμίσεις  4 αντλίες και συστήματα στράγγισης  5 αντλίες πίεσης δεξαμενής φορτίου και συστήματα ελέγχου θερμοκρασίας και συναγερμοί  6 συστήματα ελέγχου μέτρησης και συναγερμοί  7 συστήματα ανίχνευσης αερίου  9 συστήματα ανίχνευσης και ψύξης φορτίου  9 συστήματα περιβαλλοντικού ελέγχου δεξαμενής φορτίου  11 συστήματα περιβαλλοντικού ελέγχου δεξαμενής φορτίου  12 εξαερισμός περιοχής φορτίου  12 εξαερισμός περιοχής φορτίου  και εξαερισμός περιοχής φορτίου  13 συστήματα επιστροφής/ ανάκτησης στιρού	
1	τητας  Ο επικανωνίες είναι σαφείς, κατανοητές και ακότα ακό
εξαρτενή, αντλίες και υλικα εξαρτημάτων και επιστρώσεις .16 διαχείριση καταλοίπων	
.15 δεξαμενή, αντλίες και υλικά εξαρτημάτων και επιστρώσεις	

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκεια	Μέθοδα επίδα ξης ικανότητας	Κριτήρια αξιολόγησης ικανό- τητας
Ικανότητα ασφαλούς εκτέ- λεσης και παρακολούθησης όλων των εργασιών φορτί- ου (συνέχαα)		ι κανότητας	Διαδικασίες παρακολούθησης κα συστήματα ασφάλειας εξασφαλίζουν όπολα α συναγερμοί συχνεύοντα κατάλληλα κα δρούν σύμφωνα με τις θεσπισμένες διαδικασίες  Ορθή φόρτωση, στα βασία φορτίων κα εκφόρτωση εξασφαλίζει ότι η ευστάθεια κα α συνθήκες πίεσης παραμένουν στα ασφαλή ότι α διαρκώς  Πθανή μη συμμόρφωση με διαδικασίες που έχουν σχέση με τις εργασίες φορτίου αναγνωρίζοντα κατάλληλα κα αποκαθίστοντα  Μέτρα που λαμβάνοντα κα διαδικασίες που ακολουθούντα προσδιορίζοντα ορθώς και ο κατάλληλος εξαπλισμός που σχετίζετα με το φορτίο επί πλοίου, χρησισταίται ορθώς  Βαθμονόμησης και ανίχνευσης αερίου είναι συνεπής με τις ασφαλείς επιχειρησιακές πρακικές και διαδικασίες πρακικές και διαδικασίες και διαδικ
			κα ενημέρωσή του σχεπκά με πς διαδ κασίες και τα πρότυπα εργασίας που ακολουθούντα , με τρόπο κατάλληλο τα εμπλεκόμενα άτομα και σύμφωνα πς ασφαλείς επιχαρησιακές πρακπκέκ

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδε ξης ι κανότητας	Κα τήα α αξιολόγησης ικανό- τητας
Εξακείωση με τις φυακές και χημικές ιδιότητες των χημικών φορτίων	Γνώση και κατανόηση των χημικών και φυσικών ιδιοτήτων των επιβλα- βών υγρών ουσιών, συμεριλαμβα- νομένων:	Εξέταση κα αξιολόγηση αποδεικτών στα χείων που αποκτώντα από ένα ή περισσότερα από τα ακό- λουθα:	Αποτελεσματική χρήση πηγών πληροφορών για αναγνώριση ιδιοτήτων και χαρακτηριστικών επιβλαβών υγρών ουσιών και σχετικών αερίων, και επιπτώσεις τους στην ασφάλεια, στην προστασία περι-
	.1 κατηγοριών χημικών φορτίων (διαβρωκά, τοξικά, εύφλεκτα, εκρηκικά)	.1 εγκεκαμένη υπηρεσία σε πλοίο	βάλλοντος και στη λειτουργία του πλοίου
	.2 χημικών ομάδων και βιομηχανι- κή χρήση	.2 εγκεκριμένη εμπαρία εκπαίδευσης επί πλαίου	
	.3 αντιδραστικότητα φορτίων	.3 εγκεκριμένη εκπαίδευση σε προσομαωτή	
	Κατανόηση πληροφορών που πε- ρέχοντα στο Φύλλο Δεδομένων Υλικών Ασφάλειας (MSDS)	.4 εγκεκριμένο εκπα δευτικό πρόγραμμα	
Λήψη προλίηπ» κών μέτρων πρόληψης κινδύνων	ζου φορτίων συμπερλαμβάνοντας:  κών φορτίων συμπερλαμβάνοντας:	Εξέταση και αφολόγηση αποδακτικών στα χείων που αποκτώνται από ένα ή περισσότερα από τα ακό-	Σχετικοί κίνδυνα με το φορτίο για το πλοίο και για το προσωτικό που έχει αχέση με τις εργασίες φορτίου χημικού δεξαμενοπλοίου αναγνωρίζονται ορθά,
	.1 αναφλεφμότητα και έκρηξη	λουθα:	κα λήψη κατάλληλων μέτρων ελέγχου
	.2 τοξικότητα	.1 εγκεκα μένη υπηρεσία σε πλοίο	
	.3 κίνδυνα υγείας	.2 εγκεκριμένη εμπαρία	
	.4 σύνθεση αδρανούς αερίου	εκπαίδευσης επί πλοίου	
	.5 ηλεκτροσταπκοί κίνδυνα	.3 εγκεκριμένη εκπαίδευση σε προσομαωτή	
	.6 ανπδρασπκότητα	.4 εγκεκριμένο εκποιδευτικό	
	.7 διάβρωση	πρόγραμμα	
	.8 φορτία χαμηλού αημείου βρα- αμού		
	.9 φορτία υψηλής πυκνότητας		
	.10 στερεοπα ημένα φορτία		
	.11 πολυμερισμένα φορτίων		
	Γνώση και κατανόηση εινδύνων της μη συμμόρφωσης με σχετικούς κανόνες/ κανονισμούς		

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδαξης ικανότητας	Κα τήα α αξιολόγησης ικανό- τητας
Εφαρμογή επαγγελματικής υγείας και προφυλόξας ασφόλαας	Γνώση κα κατανόηση ασφαλών πρακτικών εργασίας, συμπεριλαμβάνοντας αξιολόγηση κινδύνου και προσωτική ασφάλαια στο πλοίο σχετική με χημικά δεξαμενόπλα α:  .1 μέτρα προφύλαξης προς λήψη κατά την είσοδο σε κλαιστούς χώρους, συμπεριλαμβανομένης αρθής χρήσης διάφορων τύπων αναπνευστικών συσκευών  .2 λήψη μέτρων προφύλαξης πρινικάν κατά τη διάρκαια επισκευαστικών εργασιών και συντήρησης  .3 μέτρα προφύλαξης για θερμές και ψυχρές εργασίες  .4 μέτρα προφύλαξης για ηλεκτρική ασφάλαια	Εξέταση κα αφολόγηση αποδεκτικών στα χείων που αποκτώντα από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη υπηρεσία σε πλοίο  .2 εγκεκριμένη εμπαρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομαωτή  .4 εγκεκριμένο εκπαίδευτικό πρόγραμμα	Διαδικασίες σχεδιασμένες για την προστασία του προσωπικού και του πλοίου προσωπικού και του πλοίου προύνται διαρκώς Πρακτικές ασφαλούς εργασίας τηρούνται και χρησιμοπαείται αωστά κατάλληλος προστατευτικός εξοπλιαμός ασφάλειας Πρακτικές εργασίας είναι σύμφωνες με τις νομοθετικές απαιτήσεις, κώδικες πρακτικής, άδειες εργασίας και περιβαλλοντικές ανησυχίες Ορθή χρήση αναπνευστικών αυσκευών Διαδικασίες εισόδου σε κλειστούς χώρους τηρούντα
Ανταπόκριση σε έκτακτες ανάγκες	.5 χρήση κατάλληλου Προσωπκού Προστατευπκού Εξοπλισμού (PPE)  Γνώση κα κατανόηση διαδικασών έκτακτης ανάγκης σε χημικά δεξαμενόπλα α, συμπεριλαμβανομένου:  1. σχέδια ανταπόκρισης πλοίου σε έκτακτες ανάγκες  2. εργασίες διακοπής έκτακτης ανάγκης κατά τη διάρκεια εργασιών φορπου  3. ενέργειες που λαμβάνονται σε περίπτωση αποτυχίας συστημάτων ή ουσιωδών υπηρεσιών στο φορπο  4. πυρόσβεση σε χημικά δεξαμενόπλα α  5. διάσωση σε κλειστούς χώρους  6. ανπδραστικότητα φορπου  7. απόρριψη φορπου  8. χρήση Φύλλου Δεδομένων Υλικών Ασφάλειας (MSDS)  Ενέργειες που γίνονται μετά από σύγκρουση, προσάραξη ή υπερχείλιση	Εξέταση και αφολόγηση αποδεκτικών στα χείων που αποκτώνται από ένα ή περισσότερα από τα ακόλουθα:  1 εγκεκριμένη υπηρεσία σε πλοίο  2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  3 εγκεκριμένη εκπαίδευση σε προσομαιώτή  4 εγκεκριμένο εκπαιδευτικό πρόγραμμα	κα εφαρμοζόντα όνους
	Γνώση διαδικασών πρώτων βοηθεών σε δεξαμενόπλα α χημικά, με αναφορά στον Ιατρικό Οδηγό Πρώ των Βοηθεών για Χρήση σε Ατυχή ματα με Επικίνδυνα Φορτία (ΜΕΑΚ		Αναγνώριση και ενέργειες που γίνονται σε περίπτωση ιστρικής έκτακτης ανάγκη συμμορφώνονται με την υπάρχουσα αναγνωρισμένη πρακτική πρώτων βοηθεών και τις διεθνείς κατευθυντήριες οδηγίες

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδε ξης Ικανότητας	Κα τήα α αξ ολόγησης ι κανό- τητας
Λήψη μέτρων προφύλαξης πρόληψης ρύπανσης περιβάλλοντος	Κατανόηση διαδικαιούν πρόληψης ρύπανσης ατμόσφαιρας και περε- βάλλοντος	Εξέταση και αξιολόγηση αποδεικτικών στα χείων που αποκτώνται από ένα ή περισσότερα από τα ακό- λουθα:	Οι εργασίες ἄεξάγονται σύμφωνα με πς αποδεκτές αρχές και ἄαᾶκασίες προλη- ψης ρύπανσης περ βάλλοντος
		.1 εγκεκριμένη υπηρεσία σε πλοίο	
		.2 εγκεκα μένη εμπα ρία εκπαίδευσης επί πλοίου	
		.3 εγκεκριμένη εκπαίδευση σε προσομαωτή	
		.4 εγκεκρ μένο εκπαιδευτικό πρόγραμμα	
μς νοησθεμκές αμα τύαθ ς Χος τυς απητόρφωσης πε	Γνώση και κατανόηση σχεπκών διατάξεων της Διεθνούς Σύμβασης πρόληψης Ρύπανσης από Πλοία (MARPOL) και άλλων σχεπκών οργάνων ΙΜΟ, κατευθυντήριες οδηγίες βιομηχανίας και κανοκ-	Εξέταση και αξιολόγηση αποδεικτιών σταχείων που αποκτώνται από ένα ή περισσότερα από τα ακό- λουθα:	Η διαχεία ση φορτίων συμμορφώνοντα με τα σχετικά όργανα ΙΜΟ και τα θεστισμένα βιομηχανικά πρότυπα και κώδικες πρακτικής ασφαλούς εργασίας
	κανόνα εφαρμόζοντα αμούς λιμένα όπως κατά γενικό	.1 εγκεκριμένη υπηρεσία σε πλοίο	
	Επάρχεια στην χρήση του Κώδικα ΙΒC και σχετικών εγγράφων	.2 εγκεκαμένη εμπαρία εκπαίδευσης επί πλοίου	
		.3 εγκεκριμένη εκπαίδευση σε προσομα ωτή	
		:4 εγκεκριμένο εκποιδευτικό πρόγραμμα	

#### Τμήμα Α-V/1-2

Ελάχιστες υποχρεωτικές απαιτήσεις για την εκπαίδευση και τα προσόντα πλοιάρχων, αξιωματικών και μελώνπληρώματος σε υγραεριοφόρα δεξαμενόπλοια

#### Πρότυποικανότητας

- 1 Κάθε υποψήφιος για πιστοποίηση βασικής εκπαίδευσης για εργασίες φορτίου σε υγραεριοφόρα δεξαμενόπλοια θα απατείτα:
  - .1 να επιδεικνύουν την ικανότητά τους για να αναλαμβάνουν τις εργασίες, τα καθήκοντα και τις ευθύνες που παρατίθενται στην στήλη 1 του πίνακα Α-V/1-2-1, και
  - .2 να προσκομίζουν αποδεικτικά στοιχεία ότι έχουν :
    - .2.1 την ελάχιστη γνώση, κατανόηση και επάρκεια που παρατίθενται στην στήλη 2 του πίνακα Α-V/1-2-1, και
    - .2.2 το απαιτούμενο πρότυπο ικανότητας σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης που αναφέρονται στις στήλες 3 και 4 του πίνακα Α-V/1-2-1.
- 2 Κάθε υποψήφιος για πιστοποίηση σε προχωρημένη εκπαίδευση για εργασίες φορτίου σε υγραεριοφόρα δεξαμενόπλαια θα απαιτείτα:
  - .1 να επιδεικνύει ικανότητα ανάληψης εργασιών, καθηκόντων και ευθυνών που παρατίθενται στη στήλη 1 του πίνακα Α-V/1-2-2, και
  - .2 να προσκομίζουν αποδεικτικά σταιχεία ότι έχουν:
    - .2.1 την ελάχιστη γνώση, κατανόηση και επάρκεια που παρατίθενται στη στήλη 2 του πίνακα Α-V/1-2-2, και
    - .2.2 το απαιτούμενο πρότυπο ικανότητας σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια εκτίμησης ικανότητας που αναφέρονται στις στήλες 3 και 4 του πίνακα Α-V/1-2-2.

Πίνακας Α-V/1-2-1 Καθορισμός ελάχιστου προτύπου ι κανότητας στη βασική εκπαίδευση για εργασίες φορτίου σε υγραεριοφόρα δεξαμενόπλοια

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκει α	Μέθοδα επίδα ξης ι κανότητας	Κριτήρια αξιολόγησης ικανό- τητας
Συμβολή στην ασφαλή λειτουργία υγραεριοφόρου δεξαμενοπλοίου	Σχεδιασμός και επιχαρησιακά χαρακτηριστικά υγραεριοφόρων δεξαμενοπλοίων  Βασική γνώση υγραεριοφόρων δεξαμενοπλοίων  1 τύπα υγραεριοφόρων δεξαμενοπλοίων  2 γενική ρύθμιση και κατασκευή Βασική γνώση εργασιών φορτίου:  1 συστήματα αντιλών και βαλβίδες  2 εξοπλισμός χαιραμού φορτίου  3 φόρτωση και εκφόρτωση και μέριμνα κατά τη διαμετακόμιση  4 διακοπή συστήματος έκτακτης ανάγκης (ESD)  5 καθαρισμός δεξαμενής, εκκαθάριση, απελευθέρωση αερίου και αδράνεια  Βασική γνώση φυσικών ιδιοτήτων υγραερίων, συμπεριλαμβανομένου:  1 ιδιότητες και χαρακτηριστικά  2 πίεση και θερμοκρασία, συμπεριλαμβανομένης της σχέσης πίεσης ατμού και θερμοκρασίας  3 τύπαι ηλεκτροστατικής φόρτωσης  4 χημικά σύμβολα  Γνώση και κατανόηση αγωγής ασφάλειας δεξαμενοπλοίου και διαχείρισης ασφάλειας	Εξέταση και αξιολόγηση αποδεκτικών στα χείων που αποκτώνται από ένα ή περιασότερα από τα ακόλουθα:  1. εγκεκριμένη υπηρεσία σε πλοίο  2. εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  3. εγκεκριμένη εκπαίδευση σε προσομα ωτή  4. εγκεκριμένο εκπαιδευτικό πρόγραμμα	Οι επικανωνίες στον τομέα ευθύνης είναι σαφής και αποτελεσματική Οι εργασίες φορτίου διεξάγονται σύμφωνα με τις αποδεκτές αρχές και διαδικασίες για να εξασφαλίσουν την ασφάλεια των εργασιών
Λήψη μέτρων προφύλαξης αποφυγής ανδύνων	Βασική γνώση των κινδύνων που έ- χουν σχέση με εργασίες σε δεξαμενό- πλα ο, συμπεμιλαμβάνοντας:  .1 κινδύνους υγείας  .2 κινδύνους πεμιβαλλοντικούς  .3 κινδύνους αντιδραστικότητας  .4 κινδύνους διάβρωσης  .5 κινδύνους έκρηξης και αναφλεξιμό- τητας  .6 πηγές ανάφλεξης	Εξέταση κα αξιολόγηση αποδεικτιών στα χείων που αποκτώντα από ένα ή περισσότερα από τα ακόλουθα:  1 εγκεκα μένη υπηρεσία σε πλοίο  2 εγκεκα μένη εμπειρία εκπαίδευσης επί πλοίου  3 εγκεκα μένη εκπαίδευση σε προσομα ωπή  4 εγκεκα μένο εκπαιδευτκό πρόγραμμα	Ορθή αναγνώριση σε MSDS, σχεπικών κνδύνων φορτίου για το πλοίο και το προσωπικό και ενέργειες που γίνονται σύμφωνα με τις θεσπισμένες άταδι κασίες Η αναγνώριση και αι ενέργειες για την επίγνωση επικίνδυνης κατάστασης συμμορφώνονται με τις θεσπισμένες άταδι και σίες καλύτερων πρακτικών

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση και ε- πάρκεια	Μέθοδα επίδα ξης ι κανότητας	Κριτήρια αξιολόγησης ικανό- τητας
κα ηξιρα ασφάλαας υγεινής κα προφυλάξας Εφαρηογή επαγγελμαπκής πρόληψης κα προφυλάξας	.8 κνδύνους τοξικότητας .9 ἄαρροές ατμού και νέφη .10 εξα ρεπικά χαμηλές θερμοκρασίες .11 κινδύνους πίεσης Βασκή γνώση ελέγχων κινδύνου: .1 αδράναα, τεχικές ξήρανσης και παρακολούθησης .2 ανποταπικά μέτρα .3 εξαερισμός .4 ἄαχωρισμός .5 αναστολή φορτίου .6 σπουδα ότητα συμβατότητας φορτίου .7 έλεγχος ατμόσφα ρας .8 δοκιμή αερίου Κατανόηση των πληροφοριών Φύλλου Δεδομένων Υλικών Ασφάλαιας (MSDS) Λατουργία και σωστή χρήση οργάνων μέτρησης αερίου και παρόμαιος εξοπίναμός Σωστή χρήση εξοπίναμού ασφάλαις και προστατευπικές συσκευές, συμπερλαμβάνοντας: .1 αναπνευσπικές συσκευές και εξοπίναμό εκκένωσης δεξάμενής .2 προστατευπικός μαπισμός και εξοπίναμός .3 μέσαι επαναφοράς .4 εξοπίναμός διάσωσης και διαφικά και τις κατευθυντήρες οδηγίες βιομηχανίας και προσωπική ασφάλαια στο πλοίο σχεπική με τα υγραερισφόρα δεξαμενόπλαια, συμπερλαμβάνοντας: .1 μέτραι προφύλαξης κατά την είσοδο σε κλαιστούς χώρους .2 μέτραι προφύλαξης πριν και κατά τη διάρκαια εργασιών επισκευής και συντήρησης .3 μέτραι ασφάλδιας για εργασίες θερμές και ψυχρές	Εξέταση κα αφολόγηση αποδακτικών στα χείων που αποκτώντα από ένα ή περισσότερα από τα ακόλουθα:  1 εγκεκριμένη υπηρεσία σε πλοίο  2 εγκεκριμένη εμπαρία εκπαίδευσης επί πλοίου  3 εγκεκριμένη εκπαίδευση σε προσομαωτή  4 εγκεκριμένο εκπαιδευτικό πρόγραμμα	Διαϊκασίες ασόδου σε κλαστούς χώρο πηρούντα Διαϊκασίες και πρακτικές ασφαλούς Εργασίας σχεϊί ασμένες για προύντα δια προσωπικού και πλαίου προύντα Κατάλληλος εξοπλισμός ασφάλαιας κα προστασίας χρησιμοπαιείται ορθώς
<u></u>	~ <del></del>		

Ικανότητα	Γνώση, κατανόηση και ε- πάρκει α	Μέθοδα επίδα ξης ικανότητας	Κριτήρια αξιολόγησης ικα- νότητας
Εφαρμογή μέτρων και προφυλάξεων ασφάλειας και επαγγελματικής υγείας (συνέχεια)	.4 ηλεκτρική ασφάλεια .5 λίστα ελέγχου ασφάλειας πλοίου/ ξηράς Βασική γνώση πρώτων βοηθειών με αναφορά στο Φύλλο Δεδομένων Υλ'- κών Ασφάλειας (MSDS)		Κανόνες Πρώτων Βοηθειών
Δεξαγωγή εργασιών πυ- ρόσβεσης	Οργάνωση πυρκαγιάς δεξαμενοπλοίων και ενέργειες που γίνοντα Ειδικοί κίνδυνα σχεπικοί με τη διαχείραη φορτίου και τη μεταφορά υγραερίων χύδην Πυροσβεσπικά μέσα που χρησιμοπασύνται για την κατάσβεση πυρκαγιών αερίου Λειτουργίες σταθερών συστημάτων αφρού πυρόσβεσης Λειτουργίες σταθερού ξηρού χημικού συστήματος	Πρακτικές ασκήσεις και οδηγίες άτεξάγονται υπό εγκεκα μένες και πραγματικά ρεαλιστικές συνθήκες εκπαίδευσης (π.χ συνθήκες προσομοίωσης στο πλοίο) και όποτε είναι εφικτό και πρακτικό σε κατάσταση σκότους	Αρχικές και συνεχόμενες ενέργειες στην γνώση έκτακτης ανάγκης συμμορφώνονται με τις θεστιτσμένες πρακτικές και διαδικασίες Ενέργειες που γίνονται για την ανατάλληκες με την ενδεδει γμένη έκτακτη ανάγκη και συμμορφώνονται με τις θεστιτσμένες διαδικασίες  Ιματισμός και εξοπλισμός είναι κατάλληλα με τη φύση των εργασιών πυρόσβεσης  Ο συγχρονισμός και η ακολουθία των ατομικών ενεργειών είναι κατάλληλα για τις επικρατούσες συνθήκες και καταστάσες
	Βασική γνώση περιορισμού υπερχείλι - σης σε σχέση με τις εργασίες πυρό- σβεσης		Κατάσβεση πυρκαγιάς επιτυγχάνετα με την χρήση κατάλληλων διαδικα- σιών, τεχνικών και μέσων πυρόσβε- σης
Ανταπόκριση σε έκτακτες ανάγκες	Βασική γνώση διαδικασιών έκτακτης ανάγκης, περιλαμβανομένων διακοπής έκτακτης ανάγκης	Εξέταση και αξιολόγηση αποδεικτικών στα χείων που αποκτώνται από ένα ή περισσότερα από τα ακό- λουθα:	Ο τύπος και η επίπτωση έκτακτης ανάγκης αναγνωρίζεται ορθώς και α ενέργειες ανατπόκα σης συμμορφώ- νονται με τις διαδικασίες έκτακτης ανάγκης και τα σχέδιαι ανάγκης
	-	.1 εγκεκριμένη υπηρεσία σε πλοίο .2 εγκεκριμένη εμπαιρία εκπαίδευσης επί πλοίου	·
		.3 εγκεκριμένη εκπαίδευση σε προσομα ωτή	
		.4 εγκεκριμένο εκπα δευτικό πρόγραμμα	
Λήψη προφυλάξεων πρό- ληψης ρύπαναης περβάλ- λοντος από την απελευθέ- ρωση υγραερίων	Βασική γνώση αποτελεσμάτων ρύ- πανσης στην ανθρώπινη και θαλάσσια ζωή Βασική γνώση δαδικασιών στο πλοίο	Εξέταση και αξιολόγηση αποδεκτικών στα χείων που αποκτώνται από ένα ή περισσότερα από τα ακό- λουθα:	Διαδκασίες που είναι σχεᾶασμένες για την προστασία του περβάλλοντος τηρούνται διαρκώς
	πρόληψης ρύπανσης Βασική γνώση μέτρων που λαμβάνοντα σε περίπτωση υπερχείλισης, περλαμβάνοντας την ανάγκη: .1 αναφοράς αχεπικών πληροφοριών στα αρμόδια άτομα	.1 εγκεκριμένη υπηρεσία σε πλοίο .2 εγκεκριμένη εμπαιρία εκπαίδευσης επί πλοίου .3 εγκεκριμένη εκπαίδευση σε προσομα ωτή	
	.2 υποστήριξης εφαρμογής στο πλοίο διαδικασιών περιορισμού υπερχείλισης .3 πρόληψη ραγίσματος	.4 εγκεκριμένο εκπα δευτικό πρόγραμμα	

#### Πίνακας Α-V/1-2-2

# Καθορι σμός ελάχι στου προτύπου ι κανότητας σε προχωρημένη εκπαίδευση για εργασίες φορτίου σε υγραερι οφόρα δεξαμενόπλα α

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδειξης ικα- νότητας	Κατήα α αξιολόγησης ικα- νότητας
κανότητα ασφαλούς τιαρα- κολούθησης όλων των εργασιών φορτίου	Σχεδιασμός και χαρακτηριστικά υγραεριοφόρου δεξαμενοπλοίου Γνώση σχεδίων, συστημάτων κα εξοπλισμού υγραεριοφόρου δεξαμενοπλοίου, συμπεριλαμβάνοντας:  1 τύπους υγραερισφόρων δεξαμενοπλοίων και τη κατασκευή δεξαμενών φορτίου  2 γενική ρύθμιση και κατασκευή ου, συμπεριλαμβάνοντας τα υλικά κατασκευής και μόνωνσης  4 εξοπλισμός χαιρισμό φορτίου και ενοργάνωση:  1 αντλίες φορτίου και βαλβίδες  3 συσκευές επέκτασης  4 παραπετάσματα φωπάς  5 συστήματα παρακολούθησης θερμοκρασίας  6 συστήματα μέτρησης επιπέδου δεξαμενής και συστήματα ελέγχου  7 παρακολούθησης πίεσης δεξαμενής και συστήματα ελέγχου  5. αὐστημα διατήρησης θερμοσισμός  6 συστήματα ελέγχου ατμόσφαι ρας δεξαμενών (οδρανές αέριο, άζωτο) συμπεριλαμβανομένων συστημάτων στα βασίας, παραγωγής και δανομής  7 συστήματα θέρμανσης στεγανού παραφράγματος  8 συστήματα σνίχνευσης αερίου  9 σύστημα ερμαπισμού  10 συστήματα επανυγροποίησης  12 Σύστημα Διακοπής Έκτακτης Ανάγκης (ESD)  13 φροντίδα συστήματος μεταφοράς	Εξέταση και αφολόγηση αποδεκτικών στα χείων που αποκτώνται από ένα ή περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη υπηρεσία σε πλοίο  .2 εγκεκριμένη εμπειρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομαιωτή  .4 εγκεκριμένο εκπαίδευτικό πρόγραμμα	Ο επικανωνίες είνα σαφείς, κατανοητές κα επιτυχείς Ο εργασίες φορτίου α εξάγοντα με ασφαλή τρόπο, λαμβάνοντας υπόψη τα σχέαα, τα συστήματα κα τον εξοπλομό υγραερ αφόρου δεξαμενοπλοίου Εργασίες άντλησης α εξάγοντα σύμφωνα με τις αποδεκτές αρχές κα α α α α α α α α α α α α α α α α α α

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ικα- νότητας	Κριτήρα αξιολόγησης ικα- νότητας
	Γνώση θεωρίας αντλίας και χαρα- κτηριστικών, συμπεριλαμβανομέ- νων των τύπων αντλιών φορτίου και την ασφαλή λειτουργία τους Φόρτωση, εκφόρτωση, μεριμνα και		
	χειρισμός φορτίου  Γνώση επίπτωσης ισοβύθσης, ευστάθειας και δομικής ακεραιότητας υγρών φορτίων χύδην  Επάρκεια όσον αφορά την αγωγή ασφάλειας και την εφαρμογή των απαιτήσεων διαχείρισης ασφάλειας		Σωστή φόρτωση, στα βασία και εκ- φόρτωση φορτίων υγραερίου διασφα- λίζει ότι α συνθήκες ευστάθειας και πίεσης παραμένουν σε ασφαλή όρια διαρκώς Πιθανή μη συμμόρφωση με τις διαδι- κασίες φορτίου αναγνωρίζεται και διορθώνετα
			Μέτρα που λαμβάνοντα κα διαδικασίες που ακολουθούντα αναγνωρίζουν σωστά κα χρηια μοπαιούν τον καταλλήλο εξοπλισμό πλοίου
	Επάρκαα εφαρμογής ασφαλών προεταμασών, διαδικασών κα λιστών ελέγχου για όλες τις εργασίες φορτίου, συμπεριλαμβάνοντας:		Βαθμονόμηση και χρήση εξοπλισμού παρακολούθησης και ανίχνευσης αερίου είναι συνεπής με ασφαλείς επιχαιρησιακές πρακτικές και διαδι- κασίες
	.1 Θέση ελλημενισμού και φόρτωσης: .1 επιθεώρηση δεξαμενής .2 αδράνεια (μείωση Οξυγόνου, μείωση σημείου κόρου)		Διαδικασίες για συστήματα ασφάλειας και παρακολούθησης διασφαλίζουν ότι όλοι αι συναγερμοί ανιχνεύονται ταχέως και ενεργούν σύμφωνα με θεσπισμένες αρχές
	.3 εφοά ασμός με καύσιμα		
	.4 ψύξη		
	.5 φόρτωση	·	
	.6 αφερμαπομός	,	
	.7 δειγματοληψία, συμπεριλαμ- βανομένης δειγματοληψίας κλει- στής θυρίδας		·
	.2 θαλάσσια δίοδος:		
	.1 ψύξη		
	.2 τήρηση θερμοκρασίας		
	.3 εξάτμεση		
	.4 παρεμπόδιση		
	,3 εκφόρτωση:		
	.1εκφόρτωση		
	.2 ερμαπσμός		
	.3 συστήματα αποσύνθεσης κα καθαρισμού		
	.4 συστήματα απελευθέρωσης υγρού από τη δεξαμενή		

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξηςι κα- νότητας	Κριτήρια αξιολόγησης ικα- νότητας
Ικανότητα ασφαλούς παρα-	.4 προεταμασία προ ελλιμενισμού:		
κολούθησης όλων των εργασιών φορτίου <i>(συνέ</i> -	.1 θέρμανση		
Xaa)	.2 αδράνα α		
	.3 απελευθέρωση αερίου		
	.5 μεταφορά από πλοίο σε πλοίο		
	Επάρκαα εκτέλεσης μετρήσεων φορήου και υπολογισμών, συμπεραλογισς:		
	,1 φάση υγρού		
	,2 φάση αερίου		
	,3 Ποσότητα Στο πλοίο (OBQ)		
	.4 Υπολειπόμενα στο Πλοίο (RO8)		Ανάθεση καθηκόντων στο προσωπικ
	,5 υπολογισμοί βρασμού φορτί- ου		κα ενημέρωση σχεπκά με πς διαδικο σίες και τα πρότυπα εργασίας που ακολουθούνται, σε τρόπο κατάλληλο
	Επάρκαα διαχείρισης και επίβλεψης προσωπικού με ευθύνες φορτίου	·	για τα άτομα που εμπλέκοντα κα αύμφωνα με τις ασφαλείς επιχειρησι κές πρακτικές
Εξακείωση με τις φυσικές και χημικές ιδιότητες φορ- τίων υγραερίου	Γνώση και κατανόηση βασικής χη- μείας και φυσικής και των σχετικών ορισμών που αφορούν την ασφαλή μεταφορά υγραερίων χύδην με πλίοα, συμπεριλομβάνοντας:	Εξέταση και αφολόγηση απο- δεκτικών στα χείων που απο- κτώνται από ένα ή περισσότε- ρα από τα ακόλουθα:	Αποτελεσματική χρήση επιτυγχάνετα από πηγές πληροφορών για αναγνα ριση ιδιοτήτων και χαρακτηριστικών υγραερίων και την επίπτωσή τους στην ασφάλεια, προστασία περιβάλ-
	.1 τη χημ κή δομή των αερίων	.1 εγκεκριμένη υπηρεσία σε πλοίο	λοντος και λειτουργία του πλοίου
•	.2 πς ιδιότητες και τα χαρακτηριατι- κά υγραερίων (περιλαμβανομένου	.2 εγκεκριμένη εμπειρία εκπαί- δευσης επί πλοίου	
	του CO2) και των ατμών τους, συ- μπεριλαμβάνοντας:	.3 εγκεκα μένη εκποίδευση σε προσομα ωτή	
	.1 τους νόμους απλού αερίου	.4 εγκεκριμένο εκπαιδευτικό	-
	.2 κατάσταση	πρόγραμμα	
	.3 πυκνότητες υγρού και ατμού		
	.4 ἄάχυση και ανάμξη αερίων		
	.5 συμπίεση αερίων		
	.6 επανυγροποίηση κα ψύξη αε- ρίων		
	.7 οριακή θερμοκρασία σερίων και πίεση		
	.8 σημείο ανάφλεξης, ανώτερα κα κατώτερο όρια έκρηξης, θερ- μοκρασία αυτόματης ανάφλεξης		
	.9 συμβατότητα, ανπδρασπκότη- τα και θεπκός διαχωρισμός αερί- ων		
	.10 πολυμερισμός		

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδαξηςικα- νότητας	Κριτήρα αξιολόγησης ικα- νότητας
Εξακείωση με τις φυσικές κα χημικές ιδιότητες φορτίων υγραερίου (συνέχαα)	.11 πίεση κορεσμένου ατμού/ πίεση αναφοράς .12 σημείο κόρου και σημείο φυσαλίδων .13 λίπανση συμπεστή .14 σύσταση ενυδάτωσης .3 α ιδιότητες απλών υγρών .4 η φύση και α ιδιότητες διαλυτών .5 μονάδες θερμοδυναμικής .6 νόμα και διαγράμματα βασικής θερμοδυναμικής .7ιδιότητες υψικών .8 επίπτωση χαμηλής θερμοκρασίας – ράγισμα Κατανόηση πληροφοριών που περέχονται στο Φύλλο Δεδομένων Υλικών Ασφάλδιας (MSDS)		
Λήψη μέτρων προφύλαξης αποφυγής κινδύνων	Γνώση κα κατνόηση των κνδύνων κα των μέτρων ελέγχου που έχουν σχέση με τις εργασίες φορπου υγραεριοφόρων δεξαμενοπλοίων, συμπεριλαμβάνοντας:  1.αναφλεξιμότητα 2. έκρηξη 3. τοξικότητα 4. αντιδραστικότητα 5. ἄαβρωστικότητα 6. κίνδυνα υγείας 7. σύνθεση αδρανούς αερίου 8. ηλεκτροστατικοί κίνδυνα 9. πολυμερισμένα φορτία Επάρκαια βαθμονόμησης και χρήση αυστημάτων, οργάνων και εξοττλι-	Εξέταση κα αφολόγηση αποδεκτικών σταχείων που αποκτώντα από ένα η περισσότερα από τα ακόλουθα:  .1 εγκεκριμένη υπηρεσία σε πλοίο  .2 εγκεκριμένη εμπαρία εκπαίδευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομαωτή  .4 εγκεκριμένο εκπαιδευτικό πρόγραμμα	Εχεπκοί κίνδυνα που σχετίζοντα με το φορτίο για το πλοίο και το προσωπλοίου αναγνωρίζονται σωστά και λαμβάνονται κατάλληλα μέτρα ελέγχου  Η χρήση συσκευών ανίχνευσης αερίου είναι σύμφωνη με τα εγχαρίδια και πον καλή ποσκεική
	αυστημάτων, οργάνων και εξοπλισμού παρακολούθησης και ανίχευσης αερίου  Γνώση και κατανόηση των κινδύνων μη συμμόρφωσης με τους σχεπκούς κανόνες/ κανονισμούς		την καλή πρακτική

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδε ξης ικα- νότητας	Κριτήρια αξιολόγησης ικα- νότητας
Εφαρμογή επαγγελμαπκής υγεινής κα λήψη μέτρων ασφάλειας	Γνώση κα κατανόηση των ασφαλών πρακτικών εργασίας, συμπερλαμβανομένων αξιλόγησης ανδύνου και προσωπικής ασφάλειας στο πλοίο που έχουν αχέση με υγραεανοφόρα δεξαμενόπλα α, συμπερλαμβάνοντας:  1 μέτρα προφύλαξης που λαμβάνοντα κατά την είσοδο σε κλειστούς χώρους (χώρος συμπεστή), περλαμβανομένης της ορθής χρήσης διαφορετικών τύπων αναπνευστικών συσκευών  2 μέτρα προφύλαξης που λαμβάνοντα πρυ και κατά τη διάρκεια εργασιών επισκευής και συντήρησης, συμπεριλαμβανομένων εργασιών στα συστήματα αντιλών, σωληνώσεων, ηλεκτρικών και συστημάτων ελέγχου  3 μέτρα προφύλαξης για θερμές και ψυχρές εργασίες  4 μέτρα προφύλαξης για ηλεκτρική ασφάλεια  5 χρήση κατάλληλου Προσωπικού Προστατευτικού Εξοπλισμού (PPE)  6 μέτρα προφύλαξης για κρυοπαγήματα εγκαυμάτων από κρύο  7 σωστή χρήση ατομικού εξοπλισμού παρακολούθησης τοξικότητας	Αξιών που αποδεικτικών στα- χείων που αποκτώντα από ένα ή περισσότερα από τα ακόλου- θα:  .1 εγκεκριμένη υπηρεσία σε πλοίο  .2 εγκεκριμένη εμπειρία εκπαί- δευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομα ωτή  .4 εγκεκριμένο εκπαίδευτικό πρόγραμμα	Διαδικασίες που είναι σχεδιασμένες για την προστασία του προσωπικού και του πλοίου τηρούνται διαρκώς Πρακτικές ασφαλούς εργασίας τηρούνται και χρησιμοπα είται σωστά κατάλληλος εξοπλισμός προστασίας και ασφάλειας Πρακτικές εργασίας είναι σύμφωνες με τις νομοθετικές απαιτήσες, κώδικες πρακτικής, άδαιες εργασίας και περιβαλλοντικές ανησυχίες Ορθή χρήση αναπνευστικών συσκευών
Ανταπόκριση σε έκτακτες ανάγκες	Γνώση και κατανόηση ἄαἄκασιών έκτακτης ανάγκης υγραερι οφόρων δεξαμενοπλοίων, συμπεριλαμβάνοντας:  1. σχέἄα ανταπόκρισης πλοίου σε έκτακτη ανάγκη  2. ἄαἄκασία ἄακοπής εργασιών φορτίου σε έκτακτη ανάγκη  3. λει τουργίες βαλβίδων φορτίου σε έκτακτη ανάγκη  4. μέτρα που λαμβάνονται σε περίπτωση αποτυχίας των συστημάτων ή υπηρεσιών που είναι σημανικές για τις εργασίες φορτίου  5. πυρόσβεση σε υγραεριοφόρα δεξαμενόπλα α	Αξιολόγηση αποδακτικών στα- χείων που αποκτώνται από ένα ή περισσότερα από τα ακό- λουθα:  .1 εγκεκριμένη υπηρεσία σε πλοίο  .2 εγκεκριμένη εμπαρία εκπαί- δευσης επί πλοίου  .3 εγκεκριμένη εκπαίδευση σε προσομαιώτή  .4 εγκεκριμένο εκπαιδευτικό πρόγραμμα	Τύπος και επίπτωση έκτακτης ανάγκης αναγνωρίζεται ταχέως και α ενέργιες ανταπόκρισης συμμορφώνονται με τις θεσπισμένες διαδικασίε και σχέδια έκτακτης ανάγκης  Ο βαθμός προτεραιότητας και τα επίπεδα και τα χρονοδιαγράμμαται σύνταξης αναφορών και ενημέρωσης προσωπικού στο πλοίο είναι σχετικέ με τη φύση της έκτακτης ανάγκης και αντανακλά το επείγον του προβλήματος  Εκκένωση , διακοπή έκτακτης ανάγκης και γκης και απομόνωση είναι κατάλληλ με τη φύση της έκτακτης ανάγκης και εφαρμόζεται ταχέως

Στήλη 1	Στήλη.2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκα α	Μέθοδα επίδα ξηςικα- νότητας	Κα τήα α αξιολόγησης ικα- νότητας
Ανταπόκριση σε έκτακτες ανάγκες <i>(συνέχει</i> α)	Μέτρα που λαμβάνοντα σε συνέ- χεια σύγκρουσης, προσάραξης ή υπερχείλισης και περικύκλωση του πλοίου σε τοξικά ή εύφλεκτους ατμούς		-
	Γνώση και κατανόηση διαδικασιών πρώτων βοηθειών και ανπδότων σε υγραεριοφόρα δεξαμενόπλαια, με αναφορά στον Ιστρικό Οδηγό Πρώτων Βοηθειών που Χρησιμοπαιείται για Ατυχήματα που αφορούν Επικίνδυνα Αγαθά (MFAG)		Η αναγνώρ ση και τα μέτρα που λαμβάνονται σε περίπτωση ιατρικής έκτακτης ανάγκης είναι σύμμορφες με την υπάρχουσαι ανγνωρισμένη πρακτική πρώτων βοηθαών και τις δεθνείς οδηγίες
Λήψη μέτρων προφύλαξης πρόληψης ρύπανσης περ- βάλλοντος	Κατανόηση διαδικασιών πρόληψης ρύπανσης περιβάλλοντος	Αξιολόγηση αποδεικτικών στα - χείων που αποκτώνται από ένα ή περισσότερα από τα ακό- λουθα:	Εργασίες ἄεξόγοντα σύμφωνα με τις αποδεκτές αρχές κα ἃαδικασίες πρόληψης ρύπανσης περιβάλλοντος
	-	.1 εγκεκριμένη υπηρεσία σε πλοίο	
		.2 εγκεκριμένη εμπαρία εκπαί- δευσης επί πλοίου	
		.3 εγκεκαμένη εκπαίδευση σε προσομαωτή	
		.4 εγκεκα μένο εκπα δευτικό πρόγραμμα	
Παρκολούθηση κα έλεγχος της συμμόρφωση με τις νομοθετικές απαιήσεις	Γνώση και κατανόηση σχεπικών ἄστάξεων της Δεθνούς Σύμβασης για Πρόληψη Ρύπανσης από Πλοία (MARPOL.) και άλλων σχετικών οργάνων ΙΜΟ κατευθηντλημιών	Αξιολόγηση αποδεκτικών στα- χείων που αποκτώνται από ένα ή περισσότερα από τα ακό- λουθα:	Ο χειρισμός φορτίων υγραερίων συμ- μορφώνεται με τα σχετικά όργανα ΙΜΟ και τα θεσπισμένα βιομηχανικά πρό- τυπα και κώδικες πρακτικών ασφα- λούς εργασίας
	οδηγιών βιομηχανίας και κάνον- σμών λιμένα όπως κατά γενικό κανόνα εφαρμόζονται	.1 εγκεκρμένη υπηρεσία σε πλοίο	
	Επάρκα α στην χρήση των Κωδικών ΒC και IGC και σχετικών εγγρά-	.2 εγκεκα μένη εμπα ρία εκπαί- δευσης επί πλοίου —	
	φων co κα gYeskan eliba	.3 εγκεκαμένη εκπαίδευση σε προσομαωτή	
		.4 εγκεκριμένο εκπα δευτικό πρόγραμμα	

#### Τμήμα Α- V/2

Υποχρεωτικές ελάχιστες απαιτήσεις για την εκπαίδευση και προσόντα πλοιάρχων, αξιωματικών, μελών πληρώματος και λοιπού προσωπικού επιβατηγών πλοίων

#### Εκπαίδευση δι αχείρισης πλήθους

- 1 Η εκπαίδευση διαχείρισης πλήθους που απαιτείται από τον κανονισμό V/2 παράγραφος 4 για προσωπικό που ορίζεται σε πίνακες συγκέντρωσης να βοηθά τους επιβάτες σε καταστάσεις έκτακτης ανάγκης θα περιλαμβάνει, αλλά δεν θα περιορίζεται αναγκαστικά σε:
  - .1 επίγνωση συσκευών διάσωσης και σχεδίων ελέγχου, συμεριλαμβάνομένου:
    - .1.1 γνώση πινάκων συγκέντρωσης και οδηγιών κατάστασης έκτακτης ανάγκης,
    - .1.2 γνώση εξόδων κινδύνου, και
    - .1.3 περιορισμοί στην χρήση ανελκυστήρων,
- 2 ικανότητα παροχής βοήθειας στους επιβάτες καθ' οδόν προς τους σταθμούς συγκέντρωσης και επιβίβασης συμπεριλαμβανομένων:
  - .2.1 της ικανότητας να δίνει σαφείς καθησυχαστικές εντολές,
  - .2.2 του ελέγχου των επιβατών στους διαδρόμους, κλίμακες και διόδους επιβατών,
  - .2.3 της διατήρησης οδών διαφυγής ελευθέρων από εμπόδια,
  - .2.4 των μεθόδων που είναι διαθέσιμες για εκκένωση αναπήρων και ατόμων που χρειάζονται ειδική βοήθεια, και
  - .2.5 ερεύνης στους χώρους ενδιαίτησης,
- 3 διαδικασίες συγκέντρωσης συμπεριλαμβανομένων:
  - .3.1 της σημασίας διατήρησης της τάξης,
  - .3.2 της εκανότητας χρήσης ἄαδικασιών μείωσης και αποφυγής πανικού,
  - .3.3 της ικανότητας χρήσης, όπου απαιτείται, καταλόγων επιβατών για απαρίθμηση εκκένωσης,
  - .3.4 της ικανότητας να εξασφαλίζει ότι α επιβάτες είναι κατάλληλα ενδεδυμένα και έχουν φορέσει τα σωσίβιά τους σωστά.

## Εκπαίδευση ασφαλείας για προσωπικό που παρέχα απ' ευθείας υπηρεσίες σε επιβάτες σε χώρους επιβατών

2 Η πρόσθετη εκπαίδευση ασφαλείας που απαιτείται από τον κανονισμό V/2 παράγραφος 5 θα εξασφαλίζει τουλάχιστον απόκτηση των εκανοτήτων ως ακολούθως:

#### Επικοινωνία

- .1 Ικανότητα επικανωνίας με τους επιβάτες στη διάρκαα επείγουσας ανάγκης, λαμβάνοντας υπ 'όψη;
  - .1.1 τη κατάλληλη γλώσσα ή γλώσσες για τις κύριες εθνικότητες επιβατών που μεταφέροντα στο συγκεκριμένο πλου,
  - .1.2 τη πιθανότητα ότι η ικανότητα χρήσης βασικού λεβλογίου Αγγλικής για βασικές οδηγίες μπορεί να παρέχει μέσο επικανωνίας με επιβάτη που χρείαζεται βοήθεια είτε ο επιβάτης και το μέλος πληρώματος μιλούν την ίδια γλώσσα είτε όχι,
  - .1.3 τη πιθανή ανάγκη επικοινωνίας στη διάρκεια έκτακτης ανάγκης με κάποια άλλα μέσα, όπως μέσω επίδειξης, νοημάτων με τα χέρια, ή προκαλώντας τη προσοχή στο σημείο οδηγιών,

σε σταθμούς συγκέντρωσης, σωστικές συσκευές ή οδούς εκκένωσης, όταν η προφορική επικανών είναι πρακτικά αδύνατη,

- .1.4 το βαθμό στον οποίο έχουν παρασχεθεί στους επιβάτες πλήρεις οδηγίες ασφαλείας στη μητρική τους γλώσσα ή γλώσσες, κα
- .1.5 τις γλώσσες στις οποίες μπορούν να μεταδίδονται ανακανώσεις έκτακτης ανάγκης κατά τη διάρκεια επείγουσας ανάγκης ή άσκησης για τη διαβίβαση οδηγιών κρίσιμης σημασίας σε επιβάτες για τη διευκόλυνση των μελών πληρώματος να συνδράμουν επιβάτες.

#### Σωστικές συσκευές

.2 Ικανότητα επίδειξης σε επιβάτες της χρήσης προσωπικών σωστικών συσκευών

Διαδικασίες επιβίβασης

.3 Επιβίβαση και αποβίβαση επιβατών, με ιδιαίτερη προσοχή σε ανάπηρα άτομα και άτομα που χρήζουν βοήθειας.

### Εκπαίδευση ἄ αχείρι σης κρίσεων και ανθρώπι νης συμπεριφοράς

- 3 Πλοίαρχα, πρώτα μηχανικοί, υποπλοίαρχα, δεύτερα μηχανικοί και οποιοδήποτε άτομο έχει ευθύνη ασφάλειας επιβατών σε καταστάσεις έκτακτης ανάγκης θα:
  - .1 έχει ολοκληρώσει επιτυχώς την εγκεκριμένη εκπαίδευση διαχείρισης κρίσεων και ανθρώπινης συμπεριφοράς που απαιτείται από τον κανονισμό V/2, παράγραφος 6, σύμφωνα με την ειδικότητα τους, τα καθήκοντα και τις ευθύνες τους όπως καθορίζονται στον πίνακα Α- V/2, και
  - .2 απαιτείται να παρέχει σταιχεία ότι το απαιτούμενο πρότυπο ικανότητας έχει επιτευχθεί σύμφωνα με τις μεθόδους και τα κριτήρια αξιολόγησης ικανότητας που αναφέρονται στις στήλες 3 και 4 του πίνακα A-V/2.

### Εκπαίδευση ασφάλειας επιβατών, ασφάλειας φορτίου και ακεραιότητας σκάφους

4 Η εκπαίδευση ασφάλειας επιβατών, ασφάλειας φορτίου και ακεραιότητας σκάφους που απαιτείται από τον κανονισμό V/2 παράγραφος 7, για πλοίαρχους, υποπλαιάρχους, πρώτους μηχανικούς, δεύτερους μηχανικούς και πρόσωπα που έχουν αναλάβει άμεση ευθύνη για την επιβίβαση και αποβίβαση επιβατών, για φόρτωση, εκφόρτωση ή ασφάλιση φορτίου ή για κλείσιμο αναγμάτων στο σκάφος επί επιβατηγών πλοίων το-το θα εξασφαλίζουν τουλάχιστον απόκτηση των ικανοτήτων που είναι κατάλληλες για τα καθήκοντα και τις ευθύνες τους ως ακολούθως:

#### Διαδικασίες φόρτωσης και επιβίβασης

- .1 Ικανότητα κατάλληλης εφαρμογής των θεσπισμένων διαδικασιών για το πλοίο ως ακολούθως:
  - .1.1 φόρτωση και εκφόρτωση οχημάτων, βαγονιών και άλλων μονάδων μεταφοράς φορτίου, συμπεριλαμβανομένων συναφών επικαινωνιών,
  - .1.2 καθαίρεση και ανύψωση ράμπας,
  - .1.3 τοποθέτηση και σταβασία αφαιρούμενων/ αναδιπλούμενων καταστρωμάτων οχημάτων,
  - .1.4 επιβίβαση και αποβίβαση επιβατών, με ιδιαίτερη προσοχή σε ανάπηρα άτομα και άτομα που χρήζουν βοήθειας.

#### Μεταφορά επικίνδυνων προϊόντων

.2 Ικανότητα εφαρμογής οποιωνδήποτε προφυλάξεων, διαδικασιών και απαιτήσεων σχετικά με τη μεταφορά επικίνδυνων προϊόντων σε επιβατηγά πλοία ro-ro.

#### Ασφάλιση φορτίων

.3 Ικανότητα:

- 1.1 Ορθής εφαρμογής των διατάξεων του Κώδικα Ασφαλούς Πρακτικής για Σταιβασία και Ασφάλιση Φορτίου σε οχήματα, βαγόνια και άλλες μονάδες μεταφοράς φορτίου που μεταφέρονται, και
- 1.2 Κατάλληλης χρήσης του εξοπλισμού ασφάλισης φορτίου και των παρεχόμενων υλικών, λαμβάνοντας υπ' όψη τους περιορισμούς τους.

Υπολογισμοί ευστάθειας, διαγωγής και πιέσεων

#### .4 Ικανότητα:

- .4.1 κατάλληλης χρήσης των παρεχόμενων πληροφοριών για την ευστάθεια και τις πιέσεις,
- .4.2 υπολογισμού ευστάθειας και διαγωγής για διαφορετικές συνθήκες φόρτωσης, με χρήση υπολογιστών ευστάθειας ή των προγραμμάτων υπολογισμού, που παρέχονται,
- .4.3 υπολογισμού συντελεστών φόρτωσης καταστρωμάτων, και
- .4.4 υπολογισμού του αντίκτυπου μεταφοράς έρματος και καυσίμων στην ευστάθεια, διαγωγή και πιέσεις.

Άνοιγμα, κλείσιμο και ασφάλιση ανοιγμάτων στο σκάφος

#### , 5 Ικανότητα:

- 5.1 κατάλληλης εφαρμογής θεσπισμένων διαδικασιών για το πλοίο σχετικά με το άναιγμα, κλείσιμο και ασφάλιση πλώρης και πρύμνης και πλευρικών θυρών και ραμπών και σωστής λειτουργίας σχετικών συστημάτων, και
- 5.2 διεξαγωγής επιθεώρησης για κατάλληλη στεγανοποίηση.

Ατμόσφαιρα στο κατάστρωμα Ro-Ro

#### . 6 Ικανότητα

- .6.1 χρήσης, άν υπάρχει, εξοπλισμού παρακολούθησης της ατμόσφαιρας στους χώρους φορτίου Ro-Ro, κα
- .6.2 σωστής εφαρμογής των διαδικασιών που έχουν καθιερωθεί για το πλοίο, για τον αερισμό των χώρων φορτίου Ro-Ro κατά την διάρκεια φόρτωσης και εκφόρτωσης οχημάτων, εν πλώ και σε καταστάσεις έκτακτης ανάγκης.

Πίνακας Α-V/2 Ορισμός ελάχι στων προτύπων ι κανότητας δι αχείρι σης κρίσεων και ανθρώπινης συμπεριφοράς

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4	
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ικα- νότητας	Κριτήρια αξιολόγησης ικα- νότητας	
Οργάνωση στο πλοίο δια- δικασιών έκτακτης ανάγκης	Γνώση:  .1 γενικού σχεδίου και σχεδιαγράμματος πλοίου  .2 κανονισμοί ασφάλειας  .3 σχέδια έκτακτης ανάγκης και διάδικασίες  Η σημασία των αρχών για την ανάπτυξη των διάδικασών έκτακτης ανάγκης του συγκεκαμένου πλοίου, συμπεριλαμβάνοντας:  .1 την ανάγκη προσχεδιασμού και ασκήσεων διάδικασών έκτακτης ανάγκης πλοίου  .2 την ανάγκη για όλο το προσωπικό να ενημερώνεται και να τηρεί τις προσχεδιασμένες διάδικασίες έκτακτης ανάγκης όσο πιο προσεκτικά είναι δυνατό σε περίπτωση κατάστασης έκτακτης ανάγκης	Αξιολόγηση αποδεικτικών στα- χείων που αποκτώνται από εγκεκριμένη εκποίδευση, ασκή- σεις με ένα ή περισσότερα προεταιμασμένα σχέδια έκτα- κτης ανάγκης και πρακτική επίδειξη	Ο διαδικασίες έκτακτης ανάγκης στο πλοίο διασφαλίζουν μια κατάσταση ετα μότητας για να ανταποκριθεί σε καταστάσεις έκτακτης ανάγκης	
Βελη στοποίηση χρήσης πόρων	Ικανότητα βελπατοποίησης χρήσης πόρων, λαμβάνοντας υπόψη:  .1 την πιθανότητα όπια διαθέσιμα πόρα έκτακτης ανάγκης μπορεί να είναι περιορισμένα  .2 την ανάγκη πλήρης χρησιμοποίησης του προσωπικού και του εξοπλισμού που είναι άμεσα διαθέσιμο, και αν κρίνεται απαραίτητο, να αυτοσχεδιάζε  Ικανότητα να οργανώνα ρεαλισπικές ασκήσας για να διαπρήσα μια κατάσταση εταιμότητας, λαμβάνοντας υπόψη τα μαθήματα που έχουν διδαχθεί από προηγούμενα ατυχήματα επιβατηγών πλοίων, και των απολογισμών μετά από ασκήσας	Αξιολόγηση αποδεικικών στα - χείων που αποκτώνται από εγκεκριμένη εκπαίδευση, πρακπή επίδευση στο πλοίο και ασκήσες διαδικασών έκτακτης ανάγκης	Σχέδα ανάγκης βελπιστοπαιούν την χρήση διαθέσιμων πόρων Ανάθεση καθηκόντων και ευθυνών αντανακλά την ικανότητα γνώσης των ατόμων Ρόλα και ευθύνες των ομάδων και των ατόμων καθορίζονται με σαφήνεια	
Ανταπόκριση ελέγχου σε έκτακτες ανάγκες	Ικανότητα να κάνει μια αρχική αξιολόγηση και να ανταποκρίνεται αποτελεσματικά σε καταστάσεις έκτακτης ανάγκης σύμφωνα με θεσπαμένες διαδικασίες έκτακτης ανάγκης  Ικανότητες ηγεσίας  Ικανότητα να διακεί και να καθοδηγεί τους άλλους σε καταστάσεις έκτακτης ανάγκης, συμπεριλαμβανομένης της ανάγκης:  .1 παραδειγματισμού κατά τη διάρκα καταστάσεων έκτακτης ανάγκης	Αξολόγηση αποδεκτικών στα - χείων που αποκτώντα από εγκεκρμένη εκπαίδευση, πρα- κτική επίδεξη και εκπαίδευση στο πλοίο και ασκήσεις διαδι- κασιών έκτακτης ανάγκης	Διαδικασίες και ενέργειες είναι σύμφωνες με τις θεσπισμένες αρχές και σχέδια για διαχείριση κρίσεων στο πλοίο  Αντικειμενικοί σκοποί και στρατηγική είναι κατάλληλες στη φύση της έκται κτης ανάγκης, λαμβάνοντας υπόψη τις έκτακτες ανάγκες και κάνοντας βέλτιστη χρήση των διαθέσιμων πόρων  Ενέργειες των μελών του πληρώματος συνεισφέρουν στη διατήρηση τάξης και ελέγχου	

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ικα- νότητας	Κριτήρια αξιολόγησης ικα- νότητας
Ανταπόκριση ελέγχου σε έκτακτες ανάγκες (συνέχει- α)	.2 να επικεντρώνεται στη λήψη απόφασης, δεδομένης της ανάγκης άμεσης ενέργειας σε περίπτωση- έκτακτης ανάγκης		
	.3 κινητοποίησης, ενθάρρυνσης κα εξασφάλισης επιβατών και άλλου προσωπικού		
	Διαχείριση άγχους		
	Ικανότητα να αναγνωρίζα την ανά- πτυξη συμπτωμάτων υπερβολικού ατομικού άγχους και των άλλων μελών της ομάδας έκτακτης ανά- γκης του πλοίου		
	Κατανόηση όπ το άγχος που προ- καλείται από καταστάσεις έκτακτης ανάγκης μπορεί να επηρεάσει την αποτελεσμαπκότητα των ατόμων καθώς και την ικανότητά τους να ενεργήσουν σύμφωνα με οδηγίες και να ακολουθήσουν διαδικασίες		
Έλεγχος επιβατών και άλλου προσωπικού κατά τη ἄάρκεια συνθηκών έκτα- κτης ανάγκης	Ανθρώπινη συμπεριφορά και αντα- άλλου προσωπικού σε καταστάσεις έκτακτής ανάγκης, συμπεριλαμβά- κοντας:	Αξιολόγηση αποδεκτικών στα- χείων που αποκτώντα από εγκεκα μένη εκπαίδευση, πρα- κτική επίδεξη και εκπαίδευση στο πλοίο και ασκήσεις διαδι- κασιών έκτακτης ανάγκης	Ενέργεες μελών του πληρώματος συνεισφέρουν στη διατήρηση τάξης και ελέγχου
	.1 επίγνωση των γενικών σχεδίων αντίδρασης επιβατών κα άλλου προσωπικού σε καταστάσεις έκτακτης ανάγκης, συμπερλαμβανομένης της πιθανότητας όπ:		
	.1.1 γενικά χρειάζεται κάπαιος χρό- νος πριν α άνθρωπα αποδεχτούν το γεγονός ότι υφίσταται έκτακτη ανάγκη		
	.1.2 μερικοί άνθρωπα μπορεί να πανικοβληθούν και να μην συμπεριφέρονται λογικά, και όπι η αντίληψη τους να κατανοούν μπορεί να παρεμποδίζεται και μπορεί να μην ανταποκρίνονται στις οδηγίες όπως όταν βρίσκονταν σε καταστάσεις μη έκτακτης ανάγκης		•
	2. επίγνωση ότι α επιβάτες και άλλο προσωπικό μπορεί μεταξύ άλλων να :		
	.2.1 αρχίζουν να ψάχνουν για αυγγενείς, φίλους κα / ή τα πράγματά τους ως πρώτη αντίδραση όταν κάπ πηγαίνει λάθος		
	.2.2. ψάχνουν για ασφάλεια στις καμπίνες τους ή σε άλλα μέρι του πλοίου όπου νομίζουν ότ μπορεί να διαφύγουν τον κίνδυ νο	1	

Στήλη 1 Ικανότητα	Στήλη 2 Γνώση, κατανόηση κα επάρκει α	Στήλη 3	Στήλη 4 Κα τήα α αξιολόγησης ικα- νότητας
		Μέθοδα επίδα ξης ικα- νότητας	
Έλεγχος επιβατών και άλ- λου προσωπικού κατά τη διάρκεια συνθηκών έκτα-	.2.3 τείνουν να μετακινούντα προς την άνω πλευρά όταν το πλοίο παίρνα κλίση		
κτης ανάγκης (συνέχεια)	.3 εκτίμηση τιθανού προβλήματος πανικού που είναι αποτέλεσμα χωρισμού ακογένεας		
Δημιουργία και τήρηση αποτελεσματικών επικα - νωνιών	ίκανότητα να δημιουργεί και να τηρεί αποτελεσματική επικα νωνία, συμπεριλαμβάνοντας:	Αξιολόγηση αποδεικτικών στα χείων που σποκτώντα από εγκεκα μένη εκπαίδευση, ασκή-	Πληροφορίες από όλους τους διαθέσι- μους πόρους αποκτώνται, εκπμώνται και επιβεβαιώνονται όσο το δυνατόν
	.1 την ανάγκη σαφών και συνοπη- κών οδηγιών και αναφορών	σες και πρακτική επίδειξη	γρήγορα και επανεξετάζονται μέσα από την έκτακτη ανάγκη
	.2 την ανάγκη ενθάρρυνσης αντολ- λαγής πληροφοριών με την ανα- τροφοδότηση των επιβατών και του άλλου προσωπικού		Πληροφορίες που δίνοντα στα άτομα, ομάδες ανταπόκρισης έκτακτης ανά- γκης κα επιβάτες είνα ακριβείς, σχε- πκές και έγκα ρες
	Ικανότητα να παρέχει σχετικές πληροφορίες στους επιβάτες και στο άλλο προσωπικό κατά τη ἄάρκεια έκτακτης ανάγκης, καθώς και να τους κρατά ενήμερους της γενικής κατάστασης καθώς και να κανοπαεί όπο ες απα τούμενες ἄκές τους ενέργειες, λαμβάνοντας υπόψη:		Πληροφορίες κρατούν τους επιβάτες ενήμερους όσον αφορά τη φύση της έκτακτης ανάγκης και τις ᾶκές τους απαιτούμενες ενέργειες
	1 τη γλώσσα ή τις γλώσσες κατάλ- ληλες των βασικών εθνικοτήτων τους και του άλλου προσωπικού που δεξάγει τον συγκεκριμένο πλου		
	.2 την πιθανή ανάγκη επικανωνίας κατά τη διάρκεια έκτακτης ανάγκης με άλλα μέσα, όπως με επίδειξη, ή με σήματα χεριών ή να ζητήσει την προσοχή στον χώρο οδηγιών, στους σταθμούς συγκέντρωσης, απις σωστικές αυσκευές ή στους χώρους διαφυγής, όταν προφορική επικαινωνία δεν είναι πρακτική		
	.3 την γλώσσα στην οποία ανακα- νώσεις έκτακτης ανάγκης μπορεί να μεταδοθούν κατά τη διάρκεια έκτακτης ανάγκης ή άσκησης για να διαβίβάσει σημαντική καθοδήγη- ση στους επιβάτες και να διευκολύ- νει τα μέλη πληρώματος να βοηθή-		

#### ΚΕΦΑΛΑΙΟ VI

#### Πρότυπα σχετικά με κατάσταση ανάγκης, εργασιακή ασφάλεια, ασφάλεια (security),ι ατρική μέρι μνα κα καθήκοντα επιβίωσης

Τμήμα A - VI/1

Υποχρεωτικές ελάχιστες απαιτήσεις εξοικείωσης ασφαλείας (safety), βασική εκπαίδευση και οδηγίες για όλους τους ναυτικούς

#### Εκπαίδευση εξα κείωσης ασφαλείας (safety)

- 1 Πριν αναλάβουν καθήκοντα στο πλοίο, όλα τα άτομα που εργάζονται ή απασχολούνται σε ποντοπόρο πλοίο, πλην επιβατών, θα λαμβάνουν εγκεκριμένη εκπαίδευση εξοικείωσης σε τεχνικές προσωπικής επιβίωσης ή θα λαμβάνουν επαρκείς πληροφορίες και οδηγίες, λαμβάνοντας υπόψη τις οδηγίες που δίνονται στο τμήμα Β, για να είναι σε θέση να:
  - .1 επικανωνούν με άλλα άτομα επί του πλοίου για σταχειώδη θέματα ασφαλείας (safety) και να κατανοούν τα σύμβολα πληροφοριών ασφάλειας, πινακίδες και σήματα συναγερμού,
  - .2 να γνωρίζουν τι να κάνουν αν:
    - .2.1 άτομο πέσει στη θάλασσα,
    - .2.2 ανιχνευθεί φωπά ή καπνός, ή
    - .2.3 ηχήσει συναγερμός πυρκαγιάς ή εγκατάλειψης πλοίου,
  - .3 εντοπίσουν σταθμούς συγκέντρωσης και επιβίβασης και οδούς διαφυγής σε περίπτωση ανάγκης,
  - .4 εντοπίσουν και φορέσουν ατομικά σωσίβια,
  - .5 θέσουν σε λειτουργία τον συναγερμό και να έχουν βασικές γνώσεις χρήσης φορητών πυροσβεστήρων,
  - .6 να λάβουν άμεσα ενέργειες όταν έλθουν αντιμέτωποι με ατύχημα ή άλλη κατάσταση ιατρικής ανάγκης πριν αναζητήσουν στο πλοίο περαιτέρω ιατρική βοήθεια, και
  - .7 να ανοίγουν και κλείνουν τις καιροστεγείς, υδατοστεγείς και θύρες πυρκαγιάς που υπάρχουν στο συγκεκριμένο πλοίο, πλην όσων είναι ανοίγματα στο σκελετό του πλοίου.

#### Βασική Εκπαίδευση\*

- 2 Ναυτικοί που εργάζονται ή απασχολούνται με οποιαδήποτε ειδικότητα σε πλοίο στις εμπορικές δραστηριότητες αυτού ως μέλη πληρώματός του, με καθορισμένα καθήκοντα ασφάλειας ή πρόληψης ρύπανσης κατά την λειτουργία του πλοίου, πριν αναλάβουν οπααδήποτε καθήκοντα στο πλοίο θα:
  - .1 λαμβάνουν κατάλληλη εγκεκριμένη βασική εκπαίδευση ή οδηγίες σε :
    - .1.1 τεχνικές προσωπικής επιβίωσης όπως ορίζονται στον πίνακα Α-VI/1-1,
    - .1.2 πρόληψη πυρκαγιάς και πυρόσβεση όπως ορίζεται στον πίνακα Α-VI/1-2,
    - .1.3 στα χειώδεις πρώτες βοήθειες όπως ορίζονται στον πίνακα Α-VI/1-3, και
    - .1.4 προσωτική ασφάλεια και κοινωνικές ευθύνες όπως ορίζονται στον πίνακα Α-VI/1-4,
  - .2 απαιτείται να παρέχουν αποδεικτικά στοιχεία ότι έχουν επιτύχει το απαιτούμενο πρότυποτικανότητας για να αναλάβουν τις εργασίες, καθήκοντα και ευθύνες που παρατίθενται στην στήλη 1 των πινάκων Α - VI/1-1, A - VI/1-2, A - VI/1-3 και A - VI/1-4 με:

Ο, σχεπκές πρότυπες σειρές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταμασία των εκπαιδεύσεων.

- .2.1επίδειξη ικανόητας σύμφωνα με τις μεθόδους και τα κριτήρια αξιολόγησης ικανότητας που παρατίθενται στις στήλες 3 και 4 αυτών των πινάκων, και
- .2.2 εξέταση ή συνεχή αξιολόγηση ως μέρος εγκεκριμένου προγράμματος εκπαίδευσης στα θέματα που παρατίθενται στην στήλη 2 αυτών των πινάκων.
- 3 Ναυτικοί, που πληρούν τις προϋποθέσεις στη βασική εκπαίδευση σύμφωνα με τη παράγραφο 2 θα απαιτείται, κάθε πέντε έτη, να παρέχουν αποδεικτικά στοιχεία ότι έχουν διατηρήσει το απαιτούμενο πρότυπο ικανότητας για την ανάληψη των εργασιών, καιθηκόντων και ευθυνών που παρατίθενται στη στήλη 1 των πινάκων Α-VI/1- 1 και Α- VI/1-2.
- 4 Τα Μέρη μπορεί να αποδέχονται επί του πλοίου εκπαίδευση και εμπειρία για τη διατήρηση του απαιτούμενου πρότυπου ικανότητας στους εξής τομείς:
  - .1 τεχνικές προσωπικής επιβίωσης όπως καθορίζονται στον πίνακα Α-VI/1-1:
    - .1.1 εφαρμογή ατομικού σωσιβίου,
    - .1.2 επιβίβαση σε σκάφος επιβίωσης από το πλοίο, φορώντας ατομικό σωσίβιο,
    - .1.3 να αναλαμβάνουν αρχικές ενέργειες κατά την επιβίβαση σε σωσίβια λέμβο για την αύξηση πιθανοτήτων επιβίωσης,
    - .1.4 χρήση βοηθητικής σωσίβιας λέμβου ή άγκυρας
    - .1.5 λειτουργία εξοιτλισμού σκάφους επιβίωσης,
    - .1.6 λειτουργία συσκευών εντοπισμού συμπεριλαμβανομένου εξοπλισμού ραδιοεπικοινωνιών,
  - .2 πρόληψη πυρκαγιάς και πυρόσβεση όπως καθορίζονται στον πίνακα Α VI/1-2:
    - .2.1 χρήση αυτόνομου αναπνευστικού εξοπλισμού, και
    - .2.2 πραγματοποίηση διάσωσης σε χώρο πλήρη καπνού, με χρήση εγκεκριμένης συσκευής δημουργίας καπνού, φορώντας αναπνευστικό εξοπλισμό.

#### Εξα ρέσες

5 Η Αρχή μπορεί όσον αφορά πλοία πλην επιβατηγών πλοίων άνω των 500 ο.χ. που εκτελούν δεθνείς πλόες και δεξαμενόπλοια, άν θεωρεί όπ το μέγεθος του πλοίου και η διάρκεια ή η φύση του πλου του είναι τέτσια ώστε να καθιστούν την εφαρμογή των πλήρων απαιτήσεων αυτού του μέρους παράλογη ή μη πρακτικά δυνατή, να εξαιρούν στο βαθμό αυτό τους ναυτικούς τέτσιου πλοίου ή κατηγορίας πλοίων από κάπαιες από τις απαιτήσεις πλαμβάνοντας υπ' όψη την ασφάλεια των επιβαινόντων, του πλοίου και της περιουσίας και την προστασία του θαλάσσιου περιβάλλοντος.

Πίνακας Α-VI/1-1 Καθορισμός του ελάχιστου προτύπουι κανότητας σε τεχνικές ατομικής επιβίωσης

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκει α	Μέθοδα επίδα ξης ικα- νότητας	Κριτήρια αξιολόγησης ικα- νότητας
Επιβίωση στην θάλασσα σε περίπτωση εγκατάλειψης πλοίου	Τύπος καταστάσεων έκτακτης ανάγκης που μπορεί να συμβούν όπως σύγκρουση, πυρκαγά, βύθιση Τύπος συσκευών ἄάσωσης που συνή θως υπάρχουν στα πλοία Εξοπλισμός σε σκάφη επιβίωσης Χώρος στομικών συσκευών ᾶάσωσης Αρχές που αφορούν την επιβίωση συμπεριλαμβανομένων:  1 αξίας εκπαίδευσης και γυμνασίων 2 ατομικού ιμαπισμού προστασίας και εξοπλισμού 3 ανάγκης εταιμότητας για οπαιασηποτε έκτακτη ανάγκη 4 ενεργαιών που πρέπαι ναι γίνονται όταν γίνεται κλήση στους σταθμούς σκαφών επιβίωσης 5 ενεργαιών που πρέπαι ναι γίνονται όταν απαιτείται ναι γίναι εγκατάλαιψη του πλοίου 6 ενεργαιών που πρέπαι ναι γίνονται όταν κάπαιος βρίσκεται στο νερό 7 μέτρων που πρέπαι ναι λαμβάνονται πάνω σε σκάφος επιβίωσης 8 κύριων μινδύνων για τους επιβιώσαντες	Αξολόγηση των αποδεκτικών στα χείων που λαμβάνοντα από εγκεκριμένη εκπαίδευση ή κατά την αάρκεια παρακολούθησης εγκεκριμένου κύκλου σπουδών ή εγκεκριμένη εμπερία κατά την υπηρεσία συμπερλαμβανομένης πρακτικής επίδεξης ικανότητας σε:  1 εφαρμογή ατομικού αωσαβίου  2 εφαρμογή και χρήση ατολής εμβάππισης  3 ασφαλές άλμα από ύψος στο νερό  4 επαναφορά ανεατραμμένης πνευστής σχεδίας ενώ φέρει το ατομικό σωσάβιο  5 κολύμβηση ενώ φέρει ατομικό σωσάβιο  7 να επιβιβαστεί σε σκάφος επιβίωσης από πλοίο και από το νερό ενώ φέρει το ατομικό σωσάβιο  8 να λάβει αρχικά μέτρα μετά την επιβίβαση σε σκάφος επιβίωσης για ναι αυξηθεί η πιθανότητα επιβίωσης  9 χρήση βοηθητικού ή πλωτής άγκυρας  10 να χειρίζεται τον εξοπλισμό σκάφους επιβίωσης  11 να χειρίζεται συσκευές εντοπισμού, συμπεριλαμβανον	Τα μέτρα που λαμβάνοντα όταν αναγνωμαθούν σήματα συγκέντρωσης είναι τα κατάλληλα προς την αναφερόμενη έκτακτη ανάγκη και αυμμορφώνονται με τις καθερωμένες α αδικασίες  Η ρύθμιση του χρόνου και η αλληλουχία των εξατομικευμένων ενεργθών αρμόζουν στις επικρατούσες καταστάσεις και συνθήκες και ελαχιστοπασύν τους ενδεχόμενους κινδύνους και απαλές στην επιβίωση  Η μέθοδος επιβίβασης σε ακάφη επιβίωσης είναι η κατάλληλη και αποφεύγονται κίνδυναι για άλλους διασωθέντες  Οι αρχικές ενέργθες μετά την εγκατάλθιψη από το πλοίο και αι διαδικασίες και ενέργθες στο νερό ελαχιστοπαιούν τις απαλές για επιβίωση

Πίνακας Α-VI/1-2 Κασθορισμός του ελάχιστου προτύπου ι κανότητας για την πρόληψη πυρκαγιάς και πυρόσβεσης

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδαξηςικα- νότητας	Κριτήρια αξιολόγησης ικα- νότητας
Ελαχιστοποίηση του κινδύ- νου πυρκαγιάς και διαιτή- ρηση κατάστασης ετα μό- τητας για να ανταποκρίνεται σε καταστάσεις έκτκτης ανάγκης που σχετίζονται με πυρκαγιά	Οργάνωση πυράσβεσης στο πλοίο Εντοπισμός των συσκευών πυρόσβεσης και οδοί διαφυγής σε κατάσταση έκτακτης ανάγκης Τα στα χεία πυρκαγιάς και έκρηξης (το τρίγωνο πυρκαγιάς) Τύπα και πηγές ανάφλεξης Εύφλεκτα υλικά, κίνδυναι πυρκαγιάς και εξάπλωση πυρκαγιάς Η ανάγκη για συνεχηεπαγρύπνηση Μέτρα που πρέπει να λαμβάνονται στο πλοίο Συστήματα ανίχνευσης πυρκαγιάς και καπνού και αυτόματου συναγερμού Κατάταξη πυρκαιών και χρησιμοπαιούμενα υλικά πυρόσβεσης	Αξιολόγηση των αποδεικτικών στα χείων που λαμβάνοντα από εγκεκρ μένη εκπαίδευση ή παρακολούθηση εγκεκρ μένου κύκλου σπουδών	Ο αρχικές ενέργειες προκειμένου να γίνει ανειληττή η κατάστασης έκτακτης ανάγκης συμμορφώνονται με αποδεκτές πρακεικές και διαδικασίες Ο ενέργειες που γίνονται για να αναγνωρισθούν τα σήματα συγκέντρωσης είναι α κατάλληλες στην συγ κεκριμένη κατάσταση έκτακτης ανάγκης και σύμφωνες με είς καθερωμένες διαδικασίες
Καταπολέμηση και κατά- σβέση πυρκαγιών	Εξοπλισμός πυρόσβεσης και η θέση του επί του πλοίου Εκπαίδευση σε: .1 μόνιμες εγκαταστάσεις .2 ατολές πυρόσβεσης .3 ατομικός εξαπλισμός .4 αυακευές πυρόσβεσης και εξοπλισμός .5 μέθοδα πυρόσβεσης .6 μέσα πυρόσβεσης .7 ἄαἄκασίες πυρόσβεσης .8 χρήση αναπνευστικών συσκευών για πυρόσβεση και πραγματοποίηση διασώσεων	Αξιολόγηση των αποδεικτικών στα χείων που λαμβάνοντα από εγκεκριμένη εκπαίδευση ή κατά την διάρκεια παρακολούθησης εγκεκριμένου κύκλου οπουδών συμπεριλαμβανομένης πρακτικής επίδειξης σε χώρους που παρέχουν πραγματικά ρεαλιστικές συνθήκες εκπαίδευσης (πχ. προσομοίωση συνθηκών επί του πλοίου) και όποτε είναι δυνατόν και πρακτικό, σε συνθήκες σκότους, της εκανότητας να:  1. χρησιμοπα εί διάφορους τύπους φορητών πυροσβεστήρων  2. χρήση αυτόνομης αναπνευστικής συσκευής  3. κατάσβεση μικρότερων πυρκαγών, π.χ. ηλεκτρικές πυρκαγές, πυρκαγές πετρελαίου και προπανίου  4. κατάσβεση εκτεταμένων πυρκαγών με νερό χρησιμοπαιώντας ακροφύσια εκτόξευσης και ψεκασμού  5. κατάσβεση πυρκαγών με αφρό, σκόνη ή με οπαιοδήποτε άλλο κατάλληλο χημικό μέσο	Οιμαπαμός και εξοπλισμός είναι α κατάλληλα για τη φύση των επιχειρήσεων πυρόσβεσης Η ρύθμιση χρόνου και η αλληλουχία μεμονομένων ενεργειών είναι α κατάλληλες για τις επικρατούσες καταστάσεις και συνθήκες Η πυρόσβεση επιτυγχάνεται χρησιμοπαιώντας τις κατάλληλες διαδικασίες, τεχνικές και υλικά πυρόσβεσης Διαδικασίες αναπνευστικών συσκευών και τεχνικών συμμορφούνται με αποδεκτές πρακτικές και διαδικασίες

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκεια	Μέθοδα επίδα ξηςικα- νότητας	Κριτήρια αξιολόγησης ικα- νότητας
Καταπολέμηση κα κατά- σβεση πυρκαών (συνέχεια)		.6 είσοδος και διέλευση με στο- λή διάσωσης αλλά χωρίς ανα- πνευσπκή συσκευή σε διαμέρι- σμα που έχαι εκχυθεί αφρός υψηλής εκτόνωσης	
		.7 καταπολέμηση πυρκαγιάς σε περίκλειστους χώρους που έχουν γεμίσει καπνό, φέροντας αυτόνομη αναπνευστική συσκευή	
		.8 κατάσβεση με ομίχλη νερού, ή οπα οδήποτε άλλο κατάλληλο πυροσβεσικό μέσο σε χώρο ενδιαίτησης ή προσομα ωμένο μηχανοστάσιο με φωτιά κα πυκνό καπνό	
	•	9. κατάσβεση πυρκαγάς πε- τρελαίου με συακευές ομίχλης κα ακροφύσια ψεκασμού ξη- ρής χημ κής σκόνης ή συσκευές εκτόξευσης αφρρύ	
		,10 πραγματοποίηση διάσωσης σε χώρο που είνα γεμάτος από καπνό φέροντας αναπνευστική συσκευή	

Γίνακας Α-VI/1-3 Καθορισμός ελάχιστου προτύπου ι κανότητας βασικών πρώτων βοηθειών

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ικα- νότητας	Κα τήα α αξιολόγησης ικα- νότητας
Λήψη αμέσων ενεργεών όταν προκύψε ατύχημα ή άλλητατακή κατάσταση έκτακτης ανάγκης	Αξιολόγηση των αναγκών των θυμάτων και απειλή στην ατομική ασφάλεια Αξιολόγηση της δομής και λειτουργίας του σώματος Κατανόηση των άμεσων μέτρων που πρέπει να λαμβάνονται σε περίπτωση έκτακτης ανάγκης συμπεριλαμβανομένης της ανάγκης να: .1 τοποθετήσει τον τραυματία .2 εφαρμόζει τεχνικές ανάνηψης .3 ελέγχει την αιμορραγία .4 εφαρμόζει τα κατάλληλα μέτρα βασικής διαχείρισης ηλεκτροπληξίας .5 εφαρμόζει τα κατάλληλα μέτρα σε περιπτώσεις εγκαυμάτων συμπεριλαμβανομένων ατυχημάτων που προκαλούνται από ηλεκτρικό ρεύμα .6 διασώσει και μεταφέρει τραυματία .7 αυτοσχεδιασμός με γάζες και άλλα ωλικά που υπάρχουν σε κυτίο έκτακτης ανάγκης	Αξιολόγηση των αποδεικτικών στα χείων που λαμβάνοντα από εγκεκριμένη εκπαίδευση ή κατά την πορακολούθηση εγκεκριμένου κύκλου σπουδών	Ο τρόπος και χρόνος έγεραης αυναγερμού είναι ο κατάλληλος ως προς πες αυνθήκες του ατυχήματος ή πες ιατρικής κατάστασης έκτακτης αναγκης Ο εντοπισμός του πιθανού απίου, φύσης και έκτασης των τραυμαπισμών είναι άμεσος και πλήρης και η πρωτεραφτητα και αλληλουχία των ενεργαών είναι ανάλογες ως προς τον οπαιοδήποτε επικείμενο κίνδυνο της ζωής Ο κίνδυνος περαιτέρω αυτοτραυμαπισμού ή ατυχημότων ελαχιστοπαιεί ται σε κάθε περίπτωση

Πίνακας Α-VI/1-4 Καθορι σμός ελάχι στου προτύπου ι κανότητας στην προσωτιική ασφάλεια και και νωνικές ευθύνες

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
<b>Ικανότητα</b>	Γνώση, κατανόηση και ε- πάρκεια	Μέθοδα επίδε ξης ι κανότητας	Κριτήρια αξιολόγησης ικα- νότητας
Συμμόρφωση με διαδικασί- ες έκτακτης ανάγκης	Τύπα καταστάσεων έκτακτης ανάγκης που μπορεί να συμβούν, όπως σύγκρουση, πυρκαγιά και βύθιση  Ενώση των σχεδίων ανάγκης του πλοίου για ανταπόκριση σε έκτακτες ανάγκες  Σήματα έκτακτης ανάγκης και συγκεκριμένα καθήκονται που καθορίζονται σε μέλη του πληρώματος σε καταλόγους συγκέντρωσης, σωστή χρήση του προσωπικού εξοπλισμού ασφαλείας  Μέτρα που πρέπα να ληφθούν όταν ανακαλυφθεί επικείμενη κατάσταση έκτακτης ανάγκης, συμπεριλαμβανομένης της πυρκαγιάς, σύγκρουσης, βύθισης και ασροής νερού στο πλοίο  Μέτρα που πρέπαι να ληφθούν σε ηχητικά σήματα συναγερμού έκτακτης ανάγκης  Αξία εκπαίδευσης και γυμνασίων  Ενώση των οδών διαφυγής και των εσωτερικών συστημάτων επικανω-	Αξιολόγηση των αποδεικη- κών στα χείων που λαμβά- νονται από εγκεκριμένη εκπαίδευση ή κατά την &άρ- κεια παρακολούθησης εγκε- κα μένου κύκλου σπουδών	Οι αρχικές ενέργαες προκαμένου να γίνα αναληπτή η κατάστασης έκτακτη ανάγκης συμμορφώνονται με αποδεκτές πρακτικές και διαδικασίες Οι πληροφορίες που δίνονται όταν εγερθή συναγερμός είναι άμεσες, ακαβείς, πλήρας και σαφείς
Λήψη προληπικών μέτρων για την αποφυγή ρύπανσης του θαλάσα ου περιβάλλο- ντος	Μών και συναγερμού  Βασική γνώση των επιπιώσεων της ναυπλίας στο θαλάσσιο περιβάλλον και αποτελέσματα της επιχειρησιακής ή τυχοίας ρύπανσης σε αυτό  Βασικές διαδικασίες περιβαλλοντικής προστασίας  Βασική γνώση της πολυπλοκότητας και παικλομορφίας του θαλασσίου	Αξολόγηση των αποδεικη- κών στα χείων που λαμβά- νονται από εγκεκ μένη εκ- παίδευση ή κατά την ἄάρ- κεια παρακολούθησης εγκε- κα μένου κύκλου σπουδών	Οι οργανωτικές διαδικασίες που έχοι σχεδιαστεί για να προστατεύουν το θαλάσσιο περιβάλλον τηρούνται σε κάθε περίπτωση
Τήρηση ασφαλών πρακτ- κών εργασίας	Τερ βάλλοντος  Σημασία της συνεχούς τήρησης των ασφαλών πρακτικών εργασίας  Συσκευές ασφαλείας και προστασίας που είναι διαθέσι μες για προστασία από ενδεχόμενους κινδύνους στο πλοίο  Προληπτικά μέτρα που πρέπει να λαμβάνονται προτού γίνει είσοδος σε περίκλει στους χώρους  Εξα κείωση με τα διεθνή μέτρα που αφορούν την πρόληψη ατυχημάτων και την εργασιακή υγείο*	Αξιολόγηση των αποδεικη- κών στα χείων που λαμβά- νονται από εγκεκριμένη εκπαίδευση ή κατά την διάρ- κεια παρακολούθησης εγκε- κριμένου κύκλου σπουδών	Οι ασφαλείς πρακτικές εργασίας τη- ρούντα και είναι αι κατάλληλες για τ ασφάλεια και χρησιμοπαιείται εξοπλ σμός προστασίας σε κάθε περίπτως

<sup>\*</sup> Ο Κώδικας Πρακτικής του ILO «Πρόληψη ατυχήματος εττί του πλοίου στη θάλασσα και στο λιμάνι» μπορεί να βοηθά στην προεταμοσία των εκπαιδεύσεων

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
<b>Ικανότητα</b>	Γνώση, κατανόηση κα επάρκεια	Μέθοδα επίδα ξης ι κα- νότητας	Κατήα α αξιολόγησης ικα- νότητας
Συμβολή στην αποτελεσμα- τική εττικανωνία επί του πλοίου	Κατανόηση των αρχών και των εμποδίων αποτελεσματακής επικα- νωνίας μεταξύ ατόμων και ομόδων εντός του πλοίου Ικανότητα καθιέρωσης και διατήρη- σης αποτελεσματικής επικανωνίας	Αξολόγηση των αποδεκτικών στα χείων που λαμβάνοντα από εγκεκριμένη εκπαίδευση ή κατά την διάρκεια παρακολού- θησης εγκεκριμένου κύκλου σπουδών	Οι επικανωνίες είναι πάντα σαφείς και αποτελεσματικές
Συμβολή των αποτελεσμα- πκών ανθρωπίνων σχέσε- ων στο πλοίο	Σημασία διατήρησης καλών ανθρωπίνων και εργασιακών αχέσεων στο πλοίο  Βασικές αρχές και πρακτικές συνεργασίας στο πλοίο ο υμάδας, συμπεριλαμβανομένου επίλυσης συγκρούσεων  Κανωνικές ευθύνες, συνθήκες εργασίας, ατομικά δικαώματα και υποχρεώσες, κίνδυναι από κατάχρηση ανοπνεύματος και ναρκωτικών.	Αξιολόγηση των αποδακτικών στα χείων που λαμβάνοντα από εγκεκα μένη εκπαίδευση ή κατά την διάρκαα παρακολούθησης εγκεκα μένου κύκλου σπουδών	Τα αναμενόμενα πρότυπα εργασίας και συμπεριφοράς τηρούνται σε κάθε περίπτωση
Κατανόηση κα λήψη απα- ραίτητων μέτρων για τον έλεγχο της κόπωσης	Σημασία απόκτησης απαραίτητης ανάπαυσης Επιπτώσες του ύπνου, των προμού της κόπωσης Επιπτώσες των ακαδικού ρυθιστείων εντός και εκτός του πλοίου και η επίδρασή τους στους ναυπικούς Επιπτώσες των αλλαγών προγράμματος στην κόπωση του ναυπικούς	Αξιολόγηση των αποδεικτικών στα χείων που λαμβάνοντα από εγκεκα μένη εκπαίδευση ή κατά την διάρκεια παρακολού- θησης εγκεκα μένου κύκλου σπουδών	Τηρούνται πρακτικές διαχείρισης κό- πωσης και χρησιμοτιαιούνται κατάλ- ληλα μέτρα σε κάθε περίπτωση

Τμήμα Α - VI/2

Υποχρεωτικές ελάχιστες απαιτήσεις για την έκδοση πιστοποιητικών επάρκειας σε σκάφη επιβίωσης, λέμβους διάσωσης και ταχύπλοες λέμβους διάσωσης

### ΕΠΑΡΚΕΙΑ ΣΕ ΣΚΑΦΗ ΕΠΙΒΙΩΣΗΣ ΚΑΙ ΛΕΜΒΟΥΣ ΔΙΑΣΩΣΗΣ ΕΚΤΟΣ ΤΩΝ ΤΑΧΥΠΛΟΩΝ ΛΕΜΒΩΝ ΔΙ-ΑΣΩΣΗΣ

#### Πρότυποι κανότητας

- 1 Κάθε υποψήφιος για πιστοποιητικό επάρκειας σε σκάφη επιβίωσης και λέμβους διάσωσης εκτός των ταχυπλόων λέμβων διάσωσης θα απαιτείται να επιδείξουν ικανότητα ανάληψης των εργασιών, καθηκόντων και ευθυνών που παρατίθενται στην στήλη 1 του πίνακα Α-ΫΙ/2-1.
- 2 Το επίπεδο γνώσεων στα θέματα που παρατίθενται στην στήλη 2 του πίνακα Α-VI/2-1 θα είναι επαρκές για να είναι σε θέση ο υποψήφιος να καθαιρέσει και να αναλάβει την ευθύνη σκάφους επιβίωσης ή λέμβου διάσωσης σε καταστάσεις έκτακτης ανάγκης\*.
- 3 Η επαίδευση και η εμπειρία για να επιτευχθεί το απαραίτητο επίπεδο θεωρητικών γνώσεων, κατανόησης και επάρκειας, θα πρέπει να λαμβάνει υπόψη τις οδηγίες που δίνονται στο μέρος Β αυτού του κώδικα.
- 4 Κάθε υποψήφιος για πιστοποίηση θα απαιτείται να παρέχει αποδεικτικά στοιχεία ότι έχει επιτύχει το απαιτούμενο πρότυπο ικανότητας με:
  - .1 επίδαξη ικανότητας να αναλάβα εργασίες, καθήκοντα και ευθύνες που παρατίθενται στην στήλη 1 του πίνακα Α-VI/2-1 σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που παρατίθενται στις στήλες 3 και 4 εκείνου του πίνακα, και
  - .2 εξέταση ή συνεχής αξιολόγηση ως τμήμα εγκεκριμένου προγράμματος εκπαίδευσης που καλύπτε την ύλη που παρατίθεται στην στήλη 2 του πίνακα Α-VI/2-1.
- 5 Ναυτικοί που πληρούν τις προϋποθέσεις σύμφωνα με την παράγραφο 4 σε σκάφη επιβίωσης και λέμβους διάσωσης εκτός των ταχύπλοων λέμβων διάσωσης, θα απαιτείται, κάθε πέντε έτη, να παρέχουν αποδείκτικά σταιχεία διατήρησης των απαιτούμενων προτύπων ικανότητας να αναλάβουν εργασίες, καθήκοντα και ευθύνες που παραθέτονται στην στήλη 1 του πίνακα Α-VI/2-1.
- 6 Τα Μέρη μπορεί να αποδεχτούν εκπαίδευση και εμπειρία επί του πλοίου για την τήρηση απαιτούμενων προτύπων ικανότητας του πίνακα Α-Vi/2-1 στις ακόλουθες περιοχές:
  - .1 την ανάληψη ευθύνης σκάφους επιβίωσης ή λέμβου διάσωσης κατά τη διάρκεια και μετά την καθέλκυση:
    - .1.1 ερμηνεία των ενδείξεων στο σκάφος επιβίωσης όσον αφορά στον αριθμό των ατόμων που μεταφέρουν,
    - .1.2 σωστές εντολές για καθέλκυση και επιβίβαση σε σκάφη επιβίωσης, εκκένωση πλοίου και χαρισμός και αποβίβαση ατόμων από το σκάφος επιβίωσης,
    - .1.3 την προετοιμασία και την ασφαλή καθέλκυση σκάφους επιβίωσης και γρήγορη απομάκρυνση από την πλευρά του πλοίου, και
    - .1.4 ασφαλής ανάκτηση σκάφους επιβίωσης και λέμβων διάσωσης,
  - .2 διαχείριση επιζώντων και σκάφους επιβίωσης μετά την εγκατάλειψη πλοίου:
    - .2.1 οδήγηση της λέμβου κωπηλατώντας και πηδαλιουχόντας και με τη χρήση πυξίδας,
    - .2.2 χρήση εξοπλισμού ατομικών αντικαμένων των σκαφών επιβίωσης, εκτός πυροτεχνημάτων, και
    - .2.3 χρήση συσκευών για βοήθεια εντοπισμού,

Ο σχετικές πρότυπες σειρές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταμασία των εκπαιδεύσεων

- .3 χρήση συσκευών εντοπισμού, περιλαμβανομένων συσκευών επικανωνίας και σηματοδότησης:
  - .3.1 χρήση φορητού εξοπλισμού ασυρμάτου σκάφους επιβίωσης, και
- .4 εφαρμογή πρώτων βοηθειών σε επιζώντες.

#### ΕΠΑΡΚΕΙΑ ΣΕ ΤΑΧΥΠΛΟΕΣ ΛΕΜΒΟΥΣ ΔΙΑΣΩΣΗΣ

#### Πρότυποι κανότητας

- 7 Κάθε υποψήφιος για το πιστοποιητικό επάρκειας σε ταχύπλοες λέμβους διάσωσης θα απαιτείται να επιδείξει ικανότητα να αναλάβει τις εργασίες, καθήκοντα και ευθύνες που παρατίθενται στην στήλη 1 του πίνακα Α-VI/2-2.
- 8 Το επίπεδο γνώσεων των θεμάτων που παρατίθενται στην στήλη 2 του πίνακα Α-VI/2-2 θα είναι επαρκές για να είναι σε θέση ο υποψήφιος να καθαιρέσει και να αναλάβει ταχύπλοες λέμβους διάσωσης σε καταστάσεις έκτακτης ανάγκης\*.
- 9 Η εκπαίδευση και εμπειρία για να επιτευχθεί το απαραίτητο επίπεδο θεωρητικών γνώσεων, κατανόησης και επάρκειας πρέπει να λάβει υπόψη τις οδηγίες που δίνονται στο μέρος Β αυτού του κώδικα.
- 10 Κάθε υποψήφιος για πιστοποίηση θα απαιτείται να παρέχει αποδεικτικά στοιχεία ότι έχει επιτύχει το απαιτούμενο πρότυπο ικανότητας με:
  - .1 επίδειξη ικανότητας να αναλάβει εργασίες, καθήκοντα και ευθύνες που παρατίθενται στην στήλη 1 του πίνακα Α-VI/2-2 σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που παρατίθενται στις στήλες 3 και 4 αυτού του πίνακα, και
  - .2 εξέταση ή συνεχής αξιολόγηση ως τμήμα εγκεκριμένου προγράμματος εκπαίδευσης που καλύπτει την ύλη που παρατίθεται στην στήλη 2 του πίνακα Α-VI/2-2.
- 11 Ναυτικοί που πληρούν τις προϋποθέσεις σύμφωνα με την παράγραφο 10 σε ταχύπλοες λέμβους διάσωσης θα απαιτείται, κάθε πέντε έτη, να προσκομίζουν αποδεικτικά σταχεία διατήρησης των απαιτούμενων προτύπων ικανότητας για να αναλάβουν εργασίες, καθήκοντα και ευθύνες που παρατίθενται στην στήλη 1 του πίνακα Α-VI/2-2.
- 12 Τα Μέρη μπορεί να αποδέχονται εκπαίδευση και εμπειρία επί του πλοίου για τήρηση των απαιτούμενων προτύπων ικανότητας του πίνακα Α-VI/2-2, στις ακόλουθες περιοχές:
  - .1 Ανάληψη ευθύνης σε ταχύπλοη λέμβο διάσωσης κατά τη διάρκεια και μετά την καθέκλκυση:
    - .1.1 έλεγχος ασφαλούς καθέλκυσης και ανάκτησης ταχύπλοης λέμβου διάσωσης.
    - .1.2 χειρισμός ταχύπλοης λέμβου διάσωσης σε υφιστάμενες και ρικές και θαλάσσιες συνθήκες,
    - .1.3 χρήση εξοπλισμού επικανωνιών και σηματοδότησης ανάμεσα στην ταχύπλοη λέμβο διάσωσης και σε ένα ελικόπτερο και σε ένα πλοίο,
    - .1.4 χρήση εξοπλισμού έκτακτης ανάγκης που μεταφέρεται, και
    - .1.5 διεξαγωγή έρευνας, λαμβάνοντας υπόψη περιβαλλοντικούς παράγοντες.

Οι σχετικές πρότυπες σειρές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταιμασία των εκπαιδεύσεων

Πίνακας Α-VI/2-1 Καθορισμός του ελάχι στου προτύπου ι κανότητας σε σκάφη επι βίωσης και λέμβους ἄ άσωσης εκτός των ταχύπλοων λέμβων ἄ άσωσης

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ικα- νότητας	Κριτήρια αξιολόγησης ικα- νότητας
Ανάληψη διοίκησης σε σκάφος επιβίωσης και λέμ- βο διάσωσης κατά και μετά την καθέλκυση	Κατασκευή και εξοπλισμός σκαφών επιβίωσης και λέμβων διάσωσης και εξατομ κευμένα αντικείμενα του εξοπλισμού τους Ιδιαίτερα χαρακτηριστικά και ευκολίες των σκαφών επιβίωσης και λέμβων διάσωσης Διάφορα τύπαι συσκευής που χρησκαφών επιβίωσης και λέμβων διάσωσης Μέθοδα καθέλκυσης σκαφών επιβίωσης σε ταραγμένη θάλασσα Μέθοδα ανάκτησης σκαφών επιβίωσης Μέτρα που πρέπει να λαμβάνονται ύστερα από την εγκατάλειψη του πλοίου Μέθοδα καθέλκυσης και ανάκτησης λέμβων διάσωσης σε ταραγμένη θάλασσα Κίνδυναι που σχετίζονται με τη χρήση σιακευών απελευθέρωσης φορπίου Γνώση των διαδικασιών συντήρησης	Αξιολόγηση των αποδακτικών σταχείων που λήφθηκαν από πρακτική επίδαξη της ι κανότητας να:  .1 επαναφέρα πνευστή σχεδία που έχα ανατραπεί ενώ φέρα το ατομικό σωσσίβιο  .2 ερμηνεύα τα σήματα που υπάρχουν σε σκάφος επιβίωσης άσον αφορά τον αριθμό των ατόμων που έχα κατασκευασθεί να μεταφέρα  .3 δίνα σωστές εντολές για την καθέλκυση και επιβίβαση σε σκάφος επιβίωσης, απομάκρινση από το πλοίο και την διαχείρηση και αποβίβαση ατόμων από το σκάφος επιβίωσης  .4 προεταιμάσα και καθελκύσα με ασφάλα ασκάφος επιβίωσης  .4 προεταιμάσα και καθελκύσα με ασφάλα ασκάφος επιβίωσης  .5 ασφαλής ανάκτηση σκαφών επιβίωσης φορτίου  .5 ασφαλής ανάκτηση σκαφών επιβίωσης και λέμβων διάσωσης, συμπεριλαμβανομένου της κατάλληλης επαναφοράς συσκευών απελευθέρωσης φορτίου  Χρησιμοπαιώντας: πνευστή σχεδία και ανακτή ή κλαιστή σωσίβια λέμβος με μηχανή ή εγκεκριμένη εκπαίδευση σε προσομαιωτή, όπου απαιτείτα	Η προεταμασία, επιβίβαση και καθέλ- κυση σκάφους επιβίωσης είναι εντός των περιοριστικών ορίων του εξαπλ- αμού και καθιστά ασφαλή την απομά- κρυνση από το πλοίο του σκάφους επιβίωσης Αρχικές ενέργειες μετά την εγκατά- λαψη του πλοίου ελαχιστοπαιούν τους κινδύνους στην επιβίωση Η ανάκτηση σκαφών επιβίωσης και λέμβων διάσωσης είναι εντός των πε- ριοριστικών ορίων του εξοπλισμού Ο εξοπλισμός χρησιμοπαιείται σύμ- φωναι με τις οδηγίες του κατασκευαστι ναφορά
Χει α σμός μηχανής σκά- φους επιβίωσης	Μέθοδα εκκίνησης και λειτουργίας μηχανής σκάφους επιβίωσης και των προσαρτημάτων του, με την χρήση της υπάρχουσας συσκευής πυρόσβεσης	Αξιολόγηση των αποδεικτικών στα χείων που λαμβάνονται από πρακτική επίδει ξη ικανότη- τας να εκκινήσει και λει τουργή- σει την μηχανή που υπάρχει σε ανακτή ή κλειστή πνευστή σχε- δία	Η πρόωση είναι διαθέσιμη και διατη- ρείται όπως απαιτείται για εκτέλεση ελιγμών

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκα α	Μέθοδα επίδε ξης ικα- νότητας	Κριτήρια αξιολόγησης ικα- νότητας
Διαχείριση επιβιωσάντων και σκάφους επιβίωσης ύστερα από την εγκατάλειψη του πλοίου	Χα ραμός ακόφους επιβίωσης σε δυσμενείς και ρικές συνθήκες Χρηα μοποίηση ρυμούλα ου, άγκυρας και όλου του υπόλα που εξοπλαμού Κατανομή των τροφίμων και νερού σε ακόφος επιβίωσης Μέτρα που λαμβάνονται για να μεγατοπαιηθεί η ικανότητα εντοπισμού και θέσης του ακόφους επιβίωσης Μέθοδος διάσωσης από ελικόπτερο Επιπτώσας της υποθερμίας και η πρόληψή της, χρήση προστατευπικών καλυμμάτων και ρούχων συμπεριλαμβανομένων των στολών εμβάπτισης και θερμικών προστατευπικών βοηθημάτων Χρήση λέμβων διάσωσης και μηχανοκίνητων σωσσίβων λέμβων για την καθοδήγηση σωσσιβίων σχεδών και διάσωση επιζώντων και ατόμων στην θάλασσα	Αξιολόγηση των αποδεικτιών στα χείων που λήφθηκαν από πρακτική επίδει ξη της ικανότητας να:  .1 κωπηλατήσει και πηδαλιουχήσει λέμβο με χρήση πυξίδας  .2 χρήση εξατομικευμένων αντικειμένων έξοπλισμού του σκάφους επιβίωσης  .3 κατασκευές για να διευκολυνθεί οι εντοπισμός	Η διαχείριση επιβίωσης είναι αρμό- ζουσα σύμφωνα με τις επικρατούσες συνθήκες και καταστάσεις
Χρήση συσκευών εντοπ - σμού, συμπεριλαμβανομέ- νου συσκευών επ - κανωνίας και σημάτων και πυροτεχνημάτων	Συσκευές διάσωσης ραδιοεπικανωνών που φέρονται σε σκάφη επιβίωσης, συμπεριλαμβανομένων των δορυφορικών ΕΡΙΡΒ και SART Σήματα ανάγκης με πυροτεχνήματα	Αξιολόγηση των αποδεικτικών στα χείων ττου λήφθηκαν από πρακτική επίδε ξη της ικανότητας να:  1 χρησιμοπα ήσει φορητό εξοπλισμό ραδιοεπικα νωνιών σκαφών επιβίωσης  2 χρησιμοπα ήσει εξοπλισμό σημάτων συμπεριλαμβανομένων των πυροτεχνημάτων	Η χρήση και επιλογή εξοπλιαμού επικα νωνιών και σημάτων είναι η κατάλληλη προς τις επικρατούσες συνθήκες και καταστάσεις
Παροχή πρώτων βοηθειών σε επιζώντες	Χρήση του κυπου πρώτων βοηθαών και τεχνικών ανάνηψης Περίθαλψη τραυμαπών, συμπεριλαμβανομένου του ελέγχου α μορραγίας και ηλεκτροπληξίας	Αξιολόγηση των αποδεικτικών σταχείων που λήφθηκαν από πρακτική επίδε ξη της Ικανότητας χειραφού των τραυματιών τόσο κατά την διάρκεια όσο και μετά την εγκατάλειψη, χρησμοπαώντας το κυτίο πρώτων βοηθεών και τεχνικών ανάνηψης	Ο εντοπομός του πθανού απου, φύσης και έκτασης και κατάστασης των τραυμάτων διαπιστώνονται άμεσα και με ακρίβεια Η προτεραιότητα και η αλληλουχία στην θεράπεία ελαχιστοπαιεί οπαια-δήποτε απειλή στην ζωή

### Πίνακας Α-VI/2-2 Καθορισμός ελάχιστου προτύπου ι κανότητας για ταχύπλοες λέμβους διάσωσης

Στήλη 2	Στήλη 3	Στήλη 4
Γνώση, κατανόηση κα επάρκει α	Μέθοδα επίδαξηςικα- νότητας	Κα τήα α αξιολόγησης ικα- νότητας
Κατασκευή κα εξοπλισμός ταχύ- πλοων λεμβών διάσωσης κα ιδιαί- τερα αντικείμενα του εξοπλισμού  τους  Γνώση συντήρησης κα επισκευών  έκτακτης ανάγκης ταχύπλοων λεμ- βών διάσωσης κα του κανονικού  φουσκώματος κα ξεφουσκώματος  των διαμερισμάτωνπου εξασφαλί- ζουν την πλευστότητα των φουσκω- τών ταχύπλοων λέμβων διάσωσης	Αξιολόγηση αποδεικτικών στα - χείων που λαμβάνοντα από πρακτική καθαδήγηση	Η μέθοδος ἄ εξαγωγής συνήθους συνήρησης και επισκευών έκτακτης ανάγκης Ο προσά ορι σμός των επιμέρους εξαρτημότων και του απαιτούμενου εξοπλισμού των ταχύπλοων λέμβων ά άσωσης
Αξιολόγηση ετα μότητας εξοπλισμού καθέλκυσης και συσκευής καθέλκυσης και συσκευής καθέλκυσης τα χύπλοων λέμβων διάσωσης για άμεση καθέλκυση και λειτουργία Κατανόηση λειτουργίας και περιορφών βαρούλκου, φρένων, μειωτήρων, σκαινών και παλαμαριών, των μηχανισμών αντιστάθμισης κίνησης και υπόλα που εξοπλισμού όπως είναι τοποθετημένα κατά γενικό κανόνα	Αξιολόγηση αποδεκτικών στα- χείων που λαμβάνονται από πρακτική επίδεξη ικανότητας ελέγχου ασφαλούς καθέλκυσης και ανάκτησης ταχύπλοης λέμ- βου ά άσωσης, με τον εξοπλ- σμό που είναι εγκατεστημένος	Ικανότητα να προεταμάζε κα αναλαμβάνε ευθύνη εξοττλισμού κα αυσκευών καθέλκυσης κατά τη διάρκεα καθέλκυσης και ανάκτησης τοχύπλοης λέμβου διάσωσης
κα θαλάσαες συνθήκες της ταχύπλοης λέμβου διάσωσης σε Καθέλκυση και ανάκτηση μιας τα- Χύπλοης λέμβου διάσωσης σε διάρκεια καθέλκυσης και ανάκτηση μιας τα-		
Αξιολόγηση εταιμότητας ταχύπλοων λέμβων διάσωσης και σχετικού εξοπλισμού για άμεση καθέλκυση και λατουργία Προφυλάξας ασφάλα ας κατά τη διάρκα α καθέλκυσης και ανάκτησης ταχύπλοης λέμβου διάσωσης Καθέλκυση και ανάκτηση ταχύπλοης λέμβου διάσωσης σε υφιστάμενες και δυσμενείς και ρικές και θαλάσι ες αυγύπκες	Αξιολόγηση αποδεκτικών στα- χείων που λαμβάνοντα από πρακτική επίδεξη ικανότητας διεφαγωγής ασφαλούς καθέλ- κυσης και ανάκτησης ταχύπλο- ης λέμβου δάσωσης, με εξο- πλισμό όπως είναι εγκατεστη- μένος	Ικανότητα ανάληψης ευθύνης ταχύ- πλοης λέμβου ἄάσωσης κατά τη ἄάρκεα καθέλκυσης κα ανάκτησης
ίδι σίτερα χαρακτηριστικά, εγκατα- στάσεις και περιορισμοί ταχύπλοων λέμβων διάσωσης Διαδικασίες για την ανόρθωση μας	πρακτική επιοθιζή (κανοπήτος για : .1 την επαναφορά αναποδογυ-	Επίδειξη λει τουργίας ταχύπλοων λέι βων δάσωσης στα πλαίσια των περ και ακές συμθήκες
λέμβου διάσωσης Τρόπος χειρισμού μιας ταχύπλοης λέμβου διάσωσης σε υφιστάμενες και δυσμενείς και ρικές και θαλάσαιες συνθήκες Εξοπλισμός ππλοήγησης και α-	ρ σμένης ταχύπλοης λέμβου διάσωσης  .2 τον χειρισμό ταχύπλοης λέμ- βου διάσωσης σε υφιστάμενες καιρικές και θαλάσσιες συνθή- κες	
	Κατασκευή κα εξοπλισμός ταχύπλοων λεμβών διάσωσης κα ιδιαίτερα αντικείμενα του εξοπλισμού τους  Γνώση συντήρησης κα επισκευών έκτακτης ανάγκης ταχύπλοων λεμβών διάσωσης κα του κανονικού φυσκώματος κα ξεφυσκώματος των διαμερισμάτωντου εξασφαλίζουν την πλευστότητα των φουσκωπών ταχύπλοων λέμβων διάσωσης  Αξιολόγηση εταιμότητας εξοπλισμού καθέλκυσης και συσκευής καθέλκυσης και συσκευής καθέλκυσης και συσκευής καθέλκυσης και παλαμαριών, των μηχανισμών αντιστάθματης κίνησης και υπόλα που εξοπλισμού όπως είναι τοποθετημένα κατά γενικό κανόνα  Προφυλάξας ασφάλαιας κατά τη διάρκαι καθέλκυσης και συάκτησης ταχύπλοης λέμβου διάσωσης και θιαλάσαες συνθήκες  Αξιολόγηση εταιμότητας ταχύπλοων λέμβων διάσωσης και παλαμαριών των μηχανισμόν αντιστάθματης κίνησης και υπόλα που εξοπλισμού όπως είναι τοποθετημένα κατά γενικό κανόνα  Προφυλάξας ασφάλαιας κατά τη διάρκαι καθέλκυσης και ανάκτηση μας ταχύπλοης λέμβου διάσωσης σε υπιστάμενες και δυσμενείς και ρικές και θιαλάσαες συνθήκες  Αξιολόγηση εταιμότητας ταχύπλοων λέμβων διάσωσης και ανάκτηση ταχύπλοων λέμβου διάσωσης σε υπιστάμενες και διαμενείς και ρικές και θιαλάσαες συνθήκες  Ιδιαίτερα χαρακτηριστικά, εγκαταστάσες και περιορισμοί ταχύπλοων λέμβων διάσωσης σε υπιστάμενες και διαμενείς και ρικές και θιαλάσαες συνθήκες  Τρόπος χαραμού μας ταχύπλοων λέμβου διάσωσης σε υπιστάμενες και διαμενείς και μαξιαχύπλοης λέμβου διάσωσης ταχύπλοης ταχύπλοης και συστάμενες και βιαδάσωσης ταχύπλοης και διασωσης τα συστάμενες το διασωσης τα συστάμενες και βιασωσης τα συστάμενες το διασωσης τα συστάμενες το διασωσης τα συστ	Κατασκευή κα εξοπλαμός ταχύπλοων λεμβών δάσωσης και τα τίστερα αντικέμενα του εξοπλαμόν τους  Γνώση συντήρησης κα επισκευών εκτικτης ανάγκης ταχύπλοων λεμβών δάσωσης και τοι κανονικού φουσκώματος κα ξεφουσκώματος των διμεσιστήτα των φουσκωτών ταχύπλοων λέμβων δάσωσης Αξιολόγηση εταμότητας εξοπλαμόν καθέλκυσης και συσκευής καθέλκυσης ταχύπλοης λέμβου δάσωσης και συσκευής και εγκατεστημένος  Αξιολόγηση εταμότητας ταχύπλοων λέμβων δάσωσης και σχεικού και δεόπλαμος και συσκευής και εγκατεστημένος  Αξιολόγηση εταμότητας ταχύπλοων λέμβων δάσωσης και σχεικού και δεόπλαμος και σχεικού και δεόπλαμος και σχεικού που λαμβάνοντια από χείων που λαμβάνοντια από χείων που λαμβάνοντια από χείων που λαμβάνοντια από χείων που λαμβάνοντια από προκική επίδιεξη κανότητας δεμβου δάσωσης και σγεικού πους είναι εγκατεστημένος  Αξιολόγηση αποδακικών σταχύπλομος λέμβου δάσωσης σε υφιστάμενες και δυσκενές και εκές και θελόγηση αποδακικών σταχύπλοης λέμβου δάσωσης  Ιδαίτερα χαρακτηματικά, εγκαταστάσες και περιορισμοί ταχύπλομος λέμβου δάσωσης σε υφιστάμενες και δυσμενείς και εκές και θαλόσαιες συνθήκες  Ιδαίτερα χαρακτηματικά, εγκαταστάσες και περιορισμοί ταχύπλομος λέμβου δάσωσης σε υφιστάμενες και δυσμενείς και εκές και θαλόσαιες συνθήκες  Τρόπος χαρισμού μιας ταχύπλοης λέμβου δάσωσης σε υφιστάμενες και βείνες τα χεικού πους δευστασκική επίδιες ταχύπλοης λέμβου δάσωσης σε υφιστάμενες και βείνες τα διδαωσής σε υφιστάμενες και μεξες και θαλόσαιες συνθηκες  Σίων του λαμβάνονται από τρακτική επίδιες τα διδαωσής σε υφιστάμενες και δισκευής τα δισκεικών τα συσκεισμός του

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξηςικα- νότητας	Κα τήα α αξιολόγησης ικα- νότητας
Ανάληψη ευθύνης ταχύ- πλοης λέμβου διάσωσης μετά την καθέλκυση (συνέ- χεια)	Μέθοδα έρευνας και περιβαλλονη- κοί παράγοντες που εηρεάζουν την εκτέλεση	.4 χρήση εξοπλισμού επικανω- νιών και σηματοδότησης ανά- μεσα στην ταχύπλοη λέμβο διάσωσης και σε ένα ελικόπτε- ρο και ένα πλοίο	• • •
		.5 χρήση του φερόμενου εξο- πλισμού έκτακτης ανάγκης	
-		.6 περισυλλογή τραυματία από το νερό και την μεταφορά του με ελικόπτερο ἄάσωσης ή με πλοίο σε ασφαλές μέρος	
		.7 δ εξαγωγή μεθόδων έρευνας, λαμβάνοντας υπόψη πεα βαλ- λονικούς παράγοντες	
Λα τουργία μηχανής ταχύ- πλοης λέμβου & άσωσης	Μέθοδα εκκίνησης κα χε ασμού μηχανής ταχύπλοης λέμβου διάσωσης και του εξοπλισμού της	Αξιολόγηση αποδεικτικών στα- χείων που λαμβάνονται από πρακτική επίδει ξη ι κανότητας εκκίνησης και λειτουργίας μη- χανής ταχύπλοης λέμβου διά- σωσης	Εκκίνηση μηχανής και χειρισμός πως απαιείται για πραγματοποιήση ελγμών

Τμήμα Α - VI/3

Υποχρεωτική ελάχιστη εκπαίδευση σε πυρόσβεση προχωρημένου επιπέδου

#### Πρότυποι κανότητας

- 1 Ναυτικοί που έχουν καθορισθεί να εκτελούν εργασίες πυρόσβεσης θα έχουν επιτυχώς ολοκληρώσει προχωρημένη εκπαίδευση σε τεχνικές πυρόσβεσης, με ιδιαίτερη έμφαση στην οργάνωση, τακτική και διοίκηση και θα απαιτείται να επιδείξουν ικανότητα ανάληψης εργασιών, καθηκόντων και ευθυνών που παρατίθενται στην στήλη 1 του πίνακα Α-VI/3.
- 2 Το επίπεδο γνώσεων και κατανόησης των θεμάτων που παρατίθενται στη στήλη 2 του πίνακα Α-VI/3 θα είναι επαρκές για τον αποτελεσματικό έλεγχο των εργασιών πυρόσβεσης στο πλοίο.
- 3 Η εκπαίδευση και εμπειρία για να επιτευχθεί το απαραίτητο επίπεδο θεωρητικών γνώσεων, κατανόησης και επάρκειας θα λαμβάνει υπόψη τις οδηγίες που δίνονται στο τμήμα Β αυτού του Κώδικα.
- 4 Κάθε υποψήφιος για πιστοποίηση θα απαιτείται να παρέχει αποδεικτικά στοιχεία ότι έχει επιτύχει το απαιτούμενο πρότυπο ικανότητας, σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που παρατίθενται στις στήλες 3 και 4 του πίνακα Α-Vi/3.
- 5 Ναυτικοί που πληρούν τις προϋποθέσεις σύμφωνα με την παράγραφο 4 στην προχωρημένη πυρόσβεση θα απαιτείται, κάθε πέντε χρόνια, να παρέχει τα αποδεικτικά στοιχεία ότι έχει συνεχίζει να πληροί τα απαιτούμενα πρότυπα ικανότητας για να αναλάβει καθήκοντα, ευθύνες που παρατίθενται στην στήλη 1 του πίνακα Α-Vi/3.
  - 6 Τα Μέρη μπορεί να αποδεχτούν εκπαίδευση και εμπειρία εν πλω οτι διατηρούν τα απαιτούμενα πρότυπα ικανότητας του πίνακα Α-VI/3, στις ακόλουθες περιοχές:
    - .1 Έλεγχος επιχειρήσεων πυρόσβεσης στο πλοίο:
      - .1.1 διαδικασίες πυρόσβεσης στη θάλασσα και στο λιμένα, με ιδιαίτερη έμφαση στην οργάνωση, τακτική και διοίκηση,
      - .1.2 επικανωνία και συντονισμός κατά τη διάρκεια επιχειρήσεων πυρόσβεσης,
      - .1.3 έλεγχος εξαερισμού, συμπεριλαμβανομένου εξαγωγέα καπνού,
      - .1.4 έλεγχος καυσίμων και ηλεκτρικών συστημάτων,
      - .1.5 κίνδυνα επεξεργασίας πυρόσβεσης (ξηρά απόσταξη, χημικές αντιδρά<u>σεις, λήψη λεβήτων,</u> φωπές),
      - .1.6 προληπτικά μέτρα και κίνδυναι πυρός που έχουν σχέση με την αποθήκευση και τον χειρισμό υλικών,
      - .1.7 διοίκηση και έλεγχος τραυμαπών, και
      - .1.8 διαδικασίες συντονισμού με πυροσβέστες στην ξηρά.

Γ΄Ινακας Α-VI/3 Καθορι σμός ελάχι στου πρότυπου ι κανότητας σε πυρόσ $\beta$ εση προχωρημένου επιπέδου

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδε ξης ικα- νότητας	Κριτήρια αξιολόγησης ικα- νότητας
Ελεγχος εργασιών πυρό- σβεσης στα πλοία	Διαᾶκασίες πυρόσβεσης στη θάλασσα κα στο λιμάν με ιδαίτερη έμφαση στην οργάνωση, τακπκή κα δοίκηση Χρήση νερού για πυρόσβεση, η επίπτωση στην ευστάθα α του πλοίου, προληππκά μέτρα και δεργασίες δόρθωσης Επικα νωνίες και συντονισμός κατά την δάρκαια εργασιών πυρόσβεσης Έλεγχος εξαερισμού, συμπεριλαμβανομένου του εξαγωγέα καπνού Ελεγχος συστημάτων καυσίμων και ηλεκτρισμού Κίνδυνα κατά την διαδικασία πυρόσβεσης (ξηρά απόσταξη, χημικές ανπόράσας, λήψη λεβήτων, φωπές κλπ) Πυρόσβεση επικινδύνων αγαθών Μέτρα πυροπροστασίας και κίνδυνα που σχετίζονται με την αποθήκευση και χαιρισμό υλικών (χρώματα κλπ) Διοίκηση και έλεγχος τραυμαπών Διαδικασίες συντονισμού με πυροσβέστες στην ξηρά	ΓΊρακτικές ασκήσεις και εκπαίδευση που ἄεξάγεται σε εγκεκριμένες και πλήρης ρεαλιστικές συνθήκες εκπαίδευσης (πχ. προσομα ωμένες συνθήκες πλοίου) και όπου είναι αυτό δυνατό και πρακτικό σε σκότος	Τα μέτρα που λαμβάνοντα για τον έλεγχο πυρκαγιών βασίζοντα σε ολοκληρωμένη και ακριβή αξιολόγηση του περιστατικού χρησιρισταιώντας όλες τις διαθέσιμες πηγές πληροφοριών Η σερά προτεραιοτήτων, το χρονοδιάγραμμα και αλληλουχία των ενεργειών είναι αι κατάλληλες για τις γενκές απαιτήσες του περιστατικού και ελαχιστοπαιούν την ζημιά και ενδεχόμενη ζημιά στο πλοίο, τραυματισμούς στο προσωπικό και αρνητική επίπτωση στην επιχειρησιαική αποτελέσματικότητα του πλοίου Η εκπομπή πληροφοριών είναι άμεση, ακαιβής, πλήρης και σαφής Διαφυλάσσεται πάντοτε η προσωπική ασφάλεια κατά την διάρκεια των εργασιών ελέγχου πυρκαγιάς
Οργάνωση και εκπαίδευση ομάδων πυρόσβεσης	Προετα μασία σχεδίων ανάγκης Συγκρότηση κα τοποθέτηση προσωπικού σε ομάδες πυρόσβεσης Στρατηγικές και τακτικές για τον έλεγχο πυρκαγών σε διάφορα μέρη του πλοίου	Πραγματοπαιούνται πρακτικές ασκήσεις και εκπαίδευση σε εγκεκριμένες και ρεαλιστικές συνθήκες εκπαίδευσης τι.χ. προσομαιωμένες συνθήκες πλοίου	Η συγκρότηση και οργάνωση των ομάδων ελέγχου πυρκαγιάς εξασφαλίζα την γρήγορη και αποτελεσματική εφαρμογή των σχεδίων και διαδικασών ανάγκης
Επιθεώρηση και συντήρη- ση συστημάτων και εξοπλ- σμού ανίχνευσης και πυρό- σβεσης	Τα συστήματα ανίχνευσης πυρκαγιάς, σταθερά συστήματα πυρόσβεσης, φορητός και κινητός πυροσβεσηκός εξοπλισμός συμπεριλαμβανομένων των συσκευών αντλιών και διάσωσης, διάσωση, υποστήριξης της ζωής, εξοπλισμός ατομικής προστασίας και εξοπλισμός επικανωνών	Πρακτικές ασκήσεις χρησιμο- πα ώντας εγκεκριμένο εξοπλι- σμό και συστήματα σε ρεαλιστι- κό εκπαιδευτικό περιβάλλαν	Η επιχειρησιακή αποτελεσματικότητα όλων των συστημάτων ανίχνευσης και πυρόσβεσης και του εξοπλισμού δια- τηρείται πάντοτε σύμφωνα με τις προ- διαγραφές λα τουργίας και τις νομοθε- τικές απαιτήσεις
Έρευνα περισταπκού και σύνταξη αναφοράς σε πε- ρισταπκά πυρκαγιάς	θεώρηση νηογνώμονα Αξιολόγηση της αιτίας των περιστα- εικών πυρκαγιάς	Πρακτικές ασκήσεις σε ρεαλι- στικό εκπαιδευτικό περιβάλλον	Τα αίπα πυρκαγιάς εντοπίζονται και η αποτελεσματικότητα των μέτρων κα- ταπολέμησης αφολογείται

Τμήμα Α-۷1/4

Υποχρεωτικές ελάχιστες απαιτήσεις σε ιατρικές πρώτες βοήθειες και ιατρική μέριμνα

# Πρότυπο ικανότητας για ναυτικούς που έχουν ορισθεί να παρέχουν ι ατρικές πρώτες βοήθειες στο πλοίο

- 1 Κάθε ναυτικός, που έχει ορισθεί να παρέχει ιατρικές πρώτες βοήθειες στο πλοίο θα απαιτείται να επιδείξει την ικανότητα να αναλάβει εργασίες, καθήκοντα και ευθύνες που παρατίθενται στην στήλη 1 του πίνακα Α VI/4-1.
- 2 Το επίπεδο γνώσεων των θεμάτων που παρατίθενται στην στήλη 2 του πίνακα A VI/4-1 θα είναι επαρκές για να είναι σε θέση ο ναυτικός που του έχει ανατεθεί να λάβει άμεση και αποτελεσματική ενέργεια σε περίπτωση ατυχημάτων ή ασθενείας που ενδέχεται να συμβεί στο πλοίο\*.
- 3 Κάθε υποψήφιος για πιστοποίηση σύμφωνα με τις διατάξεις του κανονισμού VI/4, παράγραφος 1 θα απατείται να παρέχει αποδεικτικά στοιχεία ότι το απαιτούμενο πρότυπο ικανότητας έχει επιτευχθεί σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που παρατίθενται στις στήλες 3 και 4 του πίνακα Α VI/4-1.

### Πρότυποι κανότητας για ναυτικούς που έχουν ορισθεί να παρέχουν ι ατρική μέρι μνα στο πλοίο

- 4 Κάθε ναυτικός που του έχουν ανατεθεί καθήκοντα ιατρικής μέριμνας στο πλοίο θα απαιτείται να επιδείξει την ικανότητα να αναλάβει τις εργασίες, καθήκοντα και ευθύνες που παρατίθενται στην στήλη 1 του πίνακα Α VI/4-2.
- 5 Το επίπεδο γνώσεων των θεμάτων της στήλης 2 του πίνακα Α-VI/4-2 θα είναι επαρκές ώστε να επιτρέπει στον ορισμένο ναυτικό να αναλάβει άμεση και αποτελεσματική δράση σε περίπτωση ατυχήματος ή ασθενείας που συνήθως συμβαίνουν στο πλοίο\*.
- 6 Κάθε υποψήφιος για πιστοποίηση σύμφωνα με τις διατάξεις του κανονισμού VI/4 παράγραφος 2 θα απαιτείται να παρουσιάσει αποδεικτικά σταχεία ότι διαθέτει το απαιτούμενο επίπεδο ικανότητας σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης που περιέχονται στις στήλες 3 και 4 του πίνακα Α-VI/4-2.

Οι σχετικές πρότυπες σειρές εκπαίδευσης ΙΜΟ μιτορεί να βοηθούν στην προεταμασία των εκπαιδεύσεων

Πίνακας Α-VV4-1 Καθορισμός ελάχιστου προτύπουι κανότητας παροχής πρώτων βοηθειών

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ικα- νότητας	Κα τήα α αξιολόγησης ικα- νότητας
Παροχή άμεσων πρώτων βοηθεών σε περίπτωση ατυχήματος ή ασθενειών στο πλοίο	Κουτί πρώτων βοηθεών  Δομή και λειτουργία του σώματος Τοξικολομικοί κίνδυναι στο πλοίο, περιλαμβανομένης της χρήσης του Οδηγού Πρώτων Βοηθεών για Χρήση σε ατυχήματα που εμπλέκο- νται επικίνδυνα φορτία (MFAG) ή του εθνικού ισοδύναμου Εξέταση τραυματία ή ασθενή Τραυματισμοί σπονδυλικής στήλης Εγκαύματα, καψήματα και αποτελέσματα της θερμότητας και του κρύου Κατάγματα, εξαρθρώσεις και μισκοί τραυματισμοί Ιστρική μέρι μναι διασωθέντων ατό- μων Ραδιοπατρικές συμβουλές Φαρμακολογία Αποστείρωση Καρδιακή ανακοπή, πνιγμός και ασφυξία	Αξιολόγηση των αποδεικτικών στα χείων που λαμβάνοντα από πρακτική εκτιαίδευση	Ο εντοπισμός πιθανών αιτών, φύσης και έκτασης των τραυμάτων είναι άμεσος, πλήρης και συμμορφώνεται με την τρέχουσα πρακτική πρώτων βοηθιών  Ο κίνδυνος αυτοτραυμαπισμού και τραυμαπισμού άλλων ελαχιστοπαιείται πάντοτε  Η θεραπεία των τραυμάτων και η κατάσταση των ασθενών είναι η κοτάληλη και συμμορφώνεται με αναγνωρισμένη πρακτική πρώτων βοηθιών και με τις διεθνείς κατευθυντήριες αδηγίες

### Πίνακας Α-VI/4-2 Καθορισμός ελάχι στου προτύπου ι κανότητας ι ατρικής μέρι μνας

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξης ικα- νότητας	Κα τήα α αξιολόγησης ικα- νότητας
Παροχή ιατα κής μέρι μνας σε ασθενείς και τραυματίες ενώ παραμένουν στο πλοίο	Φροντίδα τραυματία που περιλαμβάνουν:  1 τραυμαπαμούς κεφαλής και απονδυλικής ατήλης  2 τραυμαπαμούς αυπών, μύτης, λάρυγγα και μοπών  3 εξωτερική και εσωτερική αιμορραγία  4 εγκαύματα, καψήματα και κρυοπαγήματα  5 κατάγματα, εξαρθρώσεις και μυκά τραύματα  6 πληγές, θεραπεία πληγών και μόλυνση  7 ανακούφιση από πόνο  8 τεχικές ραφής και νάρθηκα  9 ἄαχείριση οξέων και λακών καπαστάσεων  10 μικρής κλίμακας χειρουργική θεραπεία  11 γάζες και μπαντάρισμα  Θέμαται νοσηλείας:  1 γενικές αρχές  2 φροντίδα περίθαλψης  Ασθένειες περιλαμβανομένων:  1ιατρικών συνθηκών και καταστάσεων έκτακτης ανάγκης  2 αφροδησίων νοσημάτων  3 τροπικών και μολυσματικών ασθενειών  Κατάχρηση ναρκωτικών και ανοπινεύματος  Οδονπατρική φροντίδα  Γυναικολογία, εγκυμοσύνη και τοκειτός  Ιστρική μέριμναι διασωθέντων από μων  Θάνατος στη θάλασσα  Υγιεινή		Η εξακρίβωση των συμπτωμάτων βασίζετα στις ένναες της κλινικής εξέτάσης και ιστρικού ιστορικού  Η προσιασία κατά της μόλυνσης και εξάπλωσης των ασθεναών είναι πλήρης και αποτελεσματική  Η προσωτική αντίδραση είναι ήρεμη με αυτοπεποίθηση και καθυσηχαστική Η θεραπεία των τραυμάτων ή της κατάστασης είναι η κατάληλη και συμμορφώνεται με την αποδεκτή ιστρική πρακτική και σχετικούς οδηγούς  Η δοσολογία και παροχή φαρμάκων και φαρμακευτικής αγωγής συμμορφώνεται με τις συστάστις των κατασκευαστών και την αποδεκτή ιστρικτή πρακτική  Η σημασία των αλλαγών στην κατάσταση του ασθενούς αναγνωρίζεται άμεσα

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκα α	Μέθοδα επίδα ξηςικα- νότητας	Κριτήρια αξιολόγησης ικα- νότητας
Παροχήτατα κής μέριμνας σε ασθενείς και τραυματίες ενώ παραμένουν στο πλοίο (συνέχεια)	Πρόληψη ασθενεών περιλαμβανομένων:  1 απολύμανση, απεντόμιση, μυοκτονία  2 εμβολιασμοί Τήρηση αρχείου και αντιγράφων των κανονισμών που ισχύουν:  1 πήρηση ιατρικού αρχείου  2 διεθνών και εθνικών ναυτικών ιστρικών κανονισμών		
Συμμετοχή σε συντονισμέ- να προγράμματαιατακής βοήθειας στα πλοία	Εξωτερική βοήθα α συμπεριλαμβα- νομένων:  .1 ραδιοτατρικών συμβουλών  .2 μεταφορά του αρρώστου κα τραυματία συμπεριλαμβανομένης της μεταφοράς με ελικότπερα  .3 Ιατρική φροντίδα αρρώστων ναυ- πικών που περιλαμβάνει συνεργα- σία με λιμενικές ιατρικές υπηρεσίες ή μονάδες εξωτερικών ιατρίων στο λιμάν		Ο ά αὰκασίες κλωκής εξέτασης είνα πλήρες και συμμορφώνονται με τις οδηγίες που λήφθηκαν Η μέθοδος και προεταιμασία μεταφοράς είναι σύμφωναι με ανεγνωρισμένες για να μεγιστοπαείται η καλή μεταχείρηση του αρρώστου Ο ά αὰκασίες αναζήτησης ραὰοτατρικών συμβουλών συμμορφώνονται με την καθ ερωμένη πρακτική και συστάσες

Τμήμα Α-VI/5

Υποχρεωτικές ελάχιστες απαιτήσεις για την έκδοση πιστοποιητικών επάρκειας αξιωματικών ασφάλειας πλοίου

#### Πρότυποικανότητας

- 1 Κάθε υποψήφιος για πιστοποιητικό ικανότητας αξιωματικού ασφάλειας πλοίου θα απαιτείται να επιδείξει ικανότητα να αναλάβει έργα , καθήκοντα και ευθύνες που παρατίθενται στην στήλη 1 του πίνακα Α-VI/5.
- 2 Το επίπεδο γνώσης των θεμάτων που παρατίθενται στην στήλη 2 του πίνακα Α- VI/5 θα είναι επαρκές για να καθιστά τικανό τον υποψήφιο να ενεργήσει ως ορισμένος Αξιωματικός Ασφάλειας Πλοίου.
- 3 Η Εκπαίδευση και εμπειρία ώστε να επίτευχθεί το απαραίτητο επιπέδο θεωρητικής γνώσης, κατανόησης και επάρκειας θα λαμβάνει υπόψη την καθοδήγηση του τμήματος Β-VI/5 αυτού του Κώδικα.
- 4 Κάθε υποψήφιος για πιστοποίηση θα απαιτείται να παρέχει αποδεικτικά σταιχεία ότι έχει επιτύχει το απαιτούμενο πρότυπο ικανότητας σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που παρατίθενται στις στήλες 3 και 4 του πίνακα Α-VI/5.

Πίνακας Α-VI/5 Καθορισμός ελάχιστου προτύπου ικανότητας για αξιωματικούς ασφάλειας πλοίου

Στήλη 1 Ικανότητα	Στήλη 2 Γνώση, κατανόηση κα επάρκα α	Στήλη 3 Μέθοδα επίδαξηςικα- νότητας	Στήλη 4 Κριτήρια αξιολόγησης ικα- νότητας

Στήλη 1	Στήλη 2 Γνώση, κατανόηση κα επάρκεια	Στήλη 3 Μέθοδα επίδαξηςικα- νότητας	Στήλη 4
			Κα τήα α αβ ολόγησης ι κα- νότητας
Αξιολόγηση της ασφαλέΙας (security) από κίνδυνο, απειλής και τρωτότητας	Γνώση αφολάγησης κινδύνου κα εργαλεία αφολόγησης  Γνώση εγγράφων αφολόγησης ασφάλειας, περιλαμβανομένης της Διακήρυξης Ασφάλειας  Γνώση τεχικών που χρησιμοπαιώντα για την καταστρατήγηση μέτρων ασφάλειας, συμπεριλαμβαιώντα από πειρατές και ένοπλους ληστές  Γνώση που καθιστά δυνατή την αναγνώραση, σε μη διακρική βάση, ατόμων που θέτουν σε πιθαινούς κινδύνους την ασφάλεια  Γνώση που καθιστά δυνατή την αναγνώραση όπλων, επικίνδυνων ουσών και συσκευών και επίγνωση της ζημιάς που μπορεί να προκαλέσουν  Γνώση τεχικών διαχείρισης και ελέγχου πλήθους, όπου απαιτείται πληροφοριών που αφορούν την ασφάλεια και επικαινωνών αχεπζόμενων με την ασφάλεια  Γνώση εφαρμογής και συντονισμού ερευνών  Γνώση μεθόδων σωματικών ελέγχων και διακριτικών επιθεωρήσεων	Αξιολόγηση αποδακτικών στα- χείων από εγκεκρ μένη εκπαί- δευση, ή εγκεκρ μένη εμπαρία κα εξέταση, περιλαμβανομένης πρακτικής επίδα ξης ι κανότητας σε:  1. δεξαγωγή φυσικών ερευνών 2. δεξαγωγή μη ενοχλητικών ερευνών	Δαάκασίες και ενέργειες είναι σύμφωνες με τις αρχές που θεσπίζει ο ISPS Κώάκας και η SOLAS, 1974, όπως τροποπα ήθηκε Διαάκασίες που επιτυγχάνουν εταμότητα ανταπόκη σης σε αλλαγές σε επίπεδα ναυτικής ασφάλειας Επικανωνίες στα πλαίσια αρμοδότητας αξιωματικού ασφάλειας είναι σαφείς και κατανοητές
Ανάληψη τακτικών επιθεω- ρήσεων ττλοίου για την εξασφάλιση ότι κατάλληλα μέτρα ασφάλισας (security) εφαρμόζοντα και τηρούντα	Γνώση των απατήσεων ομαμού κα παρακολούθησης απαγορευμένων περοχών  Γνώση ελέγχου πρόσβασης στο πλοίο κα στις απαγορευμένες περοχές στο πλοίο  Γνώση των θεμάτων ασφαλείας (security) που σχετίζοντα με το χειραφό του φορτίου και των εφοδίων του πλοίου, μαζί με άλλο προσωπικό του πλοίου και των υπευθύνων ασφαλείας (security) του λιμένα  Γνώση μεθόδων ελέγχου επιβίβασης, αποβίβασης και πρόσβασης ατόμων που είναι στο πλοίο και των επιπτώσεων τους	Αφολόγηση αποδεικτικών σταχείων που αποκτήθηκαν από εγκεκα μένη εκπαίδευση ή εξέταση	Διακασίες και ενέργειες είναι σύμφωνες με τις αρχές που θεσπίζονται από τον ISPS Κώδκα και την SOLA: 1974, όπως τροποπαήθηκε  Διαδικασίες επιτυγχάνουν επίπεδο εταιμότητα ώστε να αντιστα χούν στι αλλαγές στα ναυτιλιακά επίπεδα ασφάλειας (security)  Επικανωνίες στα πλαίσια αρμοδότι τας αξιωματικού ασφάλειας είναι σαφέις και κατανοητές

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξηςικα- νότητας	Κα τήα α αβ ολόγησης ικα- νότητας
Διασφάλιση όπιο εξοπλισμός και τα συστήματα ασφάλαας, εάν υπάρχουν, λατουργούν ορθώς, δοκυμάζονται και ρυθμίζοντα σωστά	Γνώση δάφορων τύπων εξοπλομού κα συστημάτων ασφάλειας (security) και περιορομών τους, συμπεριλαμβανομένων εκείνων που μπορεί να χρησιμοπαιηθούν σε περιπτώσες επιθέσεων από περατές και ένοπλους ληστές  Γνώση διαδικασών, και οδηγιών στην χρήση συστημάτων συναγερμού ασφάλειας (security) του πλοίου  Γνώση μεθόδων δοκιμής, μέτρησης και τήρησης συστημάτων και εξοπλισμού ασφάλειας (security)	Αβ ολόγηση αποδεκπκών στα - χείων από εγκεκα μένη εκπαί- δευση ή εξέταση	Διαδικασίες και ενέργειες είναι σύμφωνες με τις αρχές που θεσπίζονται από τον ISPS Κώᾶκα και την SOLAS 1974, όπως τροποπαιήθηκε
Ενθάρρυνση της ενημέρω- σης και εγρήγορσης για την ασφάλεια (security)	Ιδαίτερα εν πλω  Γνώση απα τήσεων εκπαίδευσης, γυμνασίων και ασκήσεων σύμφωνα με σχεπκές συμβάσας, κώδικες και εγκύκλους του ΙΜΟ, συμπερλαμβανομένων εκείνων που αφορούν ενάντια στην παρατεία και τις ένοπλες ληστείες  Γνώση μεθόδων ενίσχυσης και τήρησης ασφάλασς (security) στο πλοίο  Γνώση μεθόδων αξιολόγησης αποτελεσμαπκότητας γυμνασίων και ασκήσεων	Αξιολόγηση αποδεκτικών στα- χείων από εγκεκαμένη εκπαί- δευση ή εξέταση	Διαδικασίες και ενέργειες είναι σύμφωνες με τις αρχές που θεσπίζονται από τον ISPS Κώδικα και την SOLAS 1974, όπως τροποπαιήθηκε Επικανωνίες στα πλαίσια αρμοδιότητας αξιωματικού ασφάλειας (security) είναι σαφείς και κατανοητές.

Τμήμα Α-VI/6

Υποχρεωτικές ελάχιστες απαιτήσεις για εκπαίδευση και οδηγίες σχετικές με την ασφάλεια (security) για όλους τους ναυτικούς

### Πρότυποι κανότητας για εκπαίδευση εξα κείωσης με την ασφάλεια (security)

- 1 Πριν τον ορισμό καθηκόντων στο πλοίο, όλα τα άτομα που ασχολούνται ή εργάζονται σε πλοία ποντοπόρα που απαιτείται να συμμορφώνεται με τις διατάξεις του ISPS Κώδικα, πέραν των επιβατών, θα λαμβάνουν εγκεκριμένη εκπαίδευση εξοικείωσης με την ασφάλεια (security), λαμβάνοντας υπόψη τις οδηγίες που παρατίθενται στο τμήμα Β, ώστε να είναι ικανοί να:
  - .1 αναφέρουν περιστατικό ασφάλειας (security), συμπεριλαμβανομένης απειλής ή επίθεσης πειρατείας ή ένοπλης ληστείας,
  - .2 γνωρίζουν πς διαδικασίες που ακολουθούν όταν αναγνωρίζουν απειλή ασφάλειας (security), και
  - .3 λαμβάνουν μέρος στις διαδικασίες έκτακτης ανάγκης και επέιγουσας επέμβασης που έχει αχέση με την ασφάλεια (security).
- 2 Ναυπκοί με ορισμένα καθήκοντα ασφάλειας που εργάζονται σε ποντοπόρα πλοία, πριν την ανάθεση καθηκόντων, θα λαμβάνουν εκπαίδευση εξαικείωσης με θέματα ασφάλειας (security) στα καθορισμένα καθήκοντα και αρμοδιότητες, λαμβάνοντας υπόψη πς οδηγίες που παρατίθενται στο μέρος Β.
- 3 Η εκπαίδευση εξαικείωσης με θέματα ασφάλειας (security) θα διεξάγεται από τον αξιωματικό ασφάλειας πλοίου ή από ένα εξίσου προσοντούχο άτομο.

#### Πρότυποι κανότητας εκπαίδευσης γνώσης ασφάλειας

- 4 Ναυπκοί που εργάζονται ή απασχολούνται σε πλοίο οποιασδήποτε χωρηπκότητας που απαιτείται να συμμορφώνεται με τις διατάξεις του ISPS Κώδικα για τις ανάγκες του εν λόγω πλοίου, στο πλαίσιο του συμπληρώματος του πλοίου χωρίς καθορισμένα καθήκοντα, πριν την ανάθεση καθηκόντων στο πλοίο, θα:
  - .1 λαμβάνει κατάλληλη εγκεκριμένη εκπαίδευση ή οδηγίες σχετικά με την γνώση ασφάλειας (security), όπως παρατίθεται στον πίνακα Α-VI/6-1,
  - .2 απαιτείται να παρέχει αποδεικτικά στοιχεία επίτευξης απαιτούμενου προτύπου ικανότητας ανάληψης καθηκόντων και ευθυνών που παρατίθενται στην στήλη 1 του πίνακα Α-VI/6-1:
    - .2.1 με επίδειξη ικανότητας , σύμφωνα με τις μεθόδους και τα κριτήρια αξιολόγησης ικανότητας που παρατίθενται στις στήλες 3 και 4 του πίνακα Α-VI/6-1, και
    - .2.2 με εξέταση ή συνεχής αξιολόγηση ως μέρος εγκεκριμένου προγράμματος εκπαίδευσης στα θέματα που παρατίθενται στην στήλη 2 του πίνακα Α-VI/6-1...

#### Μεταβατικές διατάξεις

- 5 Έως την 1<sup>η</sup> Ιανουαρίου 2014, ναυτικοί που άρχισαν εγκεκριμένη θαλάσσια υπηρεσία πριν την ημερομηνία ένταξης σε ισχύ αυτού του τμήματος θα είναι ικανοί να τεκμηριώνουν ότι πληρούν τις απαιτήσεις της παραγράφου 4 με:
  - .1 εγκεκριμένη θαλάσσια υπηρεσία ως προσωπικό πλοίου, για περίοδο τουλάχιστον έξι μηνών συνολικά κατά τη διάρκεια των τριών προηγούμενων ετών, ή
  - .2 εκτέλεση καθηκόντων ασφάλειας (security) που θεωρούνται ισόπμα με τη θαλάσσια υπηρεσία που απαιτείται στην παράγραφο 5.1, ή
  - .3 επιτυχία σε εγκεκριμένη εξέταση, ή
  - .4 ολοκλήρωση με επιτυχία εγκεκριμένης εκπαίδευσης.

#### Πρότυποι κανότητας για ναυτικούς με καθορισμένα καθήκοντα ασφάλειας (security)

- 6 Κάθε ναυτικός που είναι ορισμένος να εκτελεί καθήκοντα ασφάλειας (security), συμπεριλαμβανομένων δραστηριοτήτων κατά της παρατείας και της ένοπλης ληστείας, θα απαιτείται να επιδείξει ικανότητα ανάληψης εργασιών, καθηκόντων και ευθυνών που παρατίθενται στην στήλη 1 του πίνακα Α-VI/6-2.
- 7 Το επίπεδο γνώσης θεμάτων στην στήλη 2 του πίνακα A-VI/6-2 θα είναι επαρκές για να καθιστά ικανό κάθε υποψήφιο να εκτελεί καθορισμένα καθήκοντα ασφάλειας (security) στο πλοίο, συμπεριλαμβανομένων δραστηριοτήτων κατά της πειρατείας και της ένοπλης ληστείας.
- 8 Κάθε υποψήφιος για πιστοποίηση θα απαιτείται να παρέχει αποδεικτικά στοιχεία ότι έχει επιτευχθεί το απαιτούμενο πρότυποικανότητας με:
  - .1 επίδειξη ικανότητας ανάληψης εργασιών, καθηκόντων και ευθυνών που παρατίθενται στην στήλη 1 του πίνακα Α-VI/6-2, σύμφωνα με τις μεθόδους επίδειξης ικανότητας και τα κριτήρια αξιολόγησης ικανότητας που παρατίθενται στις στήλες 3 και 4 αυτού του πίνακα, και
  - .2 εξέταση ή συνεχής αξιολόγηση ως μέρος εγκεκριμένου εκπαιδευτικού προγράμματος που καλύπτει την ύλη που παρατίθεται στην στήλη 2 του πίνακα Α-VI/6-2.

#### Μεταβατικές διατάξεις

- 9 Έως την 1<sup>η</sup> Ιανουαρίου 2014, ναυτικοί που άρχισαν εγκεκριμένη θαλάσσια υπηρεσία πριν την ημερομηνία ένταξης σε ισχύ αυτού του τμήματος θα είναι ικανοί να επιδείξουν ικανότητα ανάληψης εργασιών, καθηκόντων και ευθυνών που παρατίθενται στην στήλη 1 του πίνακα Α-VI/6-2:
  - .1 εγκεκριμένη θαλάσσια υπηρεσία ως προσωπικό πλοίου με ορισμένα καθήκοντα ασφάλειας (security), για περίοδο τουλάχιστον έξι μηνών συνολικά κατά τη διάρκεια των τριών προηγούμενων ετών, ή
  - .2 εκτέλεση καθηκόντων ασφάλειας (security) που θεωρούνται ισόπμα με τη θαλάσσια υπηρεσία που απαιτείται στην παράγραφο 5.1, ή
  - .3 επιτυχία σε εγκεκριμένη εξέταση, ή
  - .4 ολοκλήρωση με επιτυχία εγκεκριμένης εκπαίδευσης.

## Πίνακας Α-VI/6-1 Καθορισμός ελάχιστου προτύπου ι κανότητας επίγνωσης ασφάλειας (security)

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδαξηςικα- νότητας	Κα τήα α αξιολόγησης ικα- νότητας
Συμβολή στην ενίσχυση της ναυπλιακής ασφάλειας μέσω αυξημένης επίγνω- αης	Βασική εργασιακή γνώση των όρων και ορισμών ναυπλιακής ασφάλειας (security), συμπεριλαμβανομένων των στα χείων που μπορεί να έχουν αχέση με την παιρατεία και την ένοπλη ληστεία	Αξιολόγηση αποδεικτικών στα- χείων που αποκτούντα από εγκεκριμένη εκπαίδευση ή κατά τη διάρκεια παρακολούθησης εγκεκριμένου προγράμματος σπουδών	Απατήσεις που σχετίζοντα με την ενισχυμένη ναυπιλιακή ασφάλεια (security) αναγνωρίζονται αρθώς
	Βασική γνώση της διεθνούς ναυπίνακής πολιτικής για την ασφάλαα κα των ευθυνών των Κυβερνήσεων, Εταιριών και προσώπων		
	Βασική γνώση επιπέδων ναυπλα- κής ασφάλαας και της επίπτωσής τους στα μέτρα ασφάλαας (security) και σπις διαδικασίες στο πλοίο και σπις εγκαταστάσεις λιμένα		
	Baaκή γνώση διαδικασών αναφοράς ασφάλειας (security)		
	Βασική γνώση σχεδίων έκτακτής ανάγκης που έχουν σχέση με την ασφάλα α		
Αναγνώρ ση απελών ασφάλειας (security)	Βασική γνώση τεχνικών που χρησι- μετρων ασφάλειας (security)	Αξιολόγηση αποδεικτικών στα- χείων που αποκτούνται από εγκεκα μένη εκπαίδευση ή κατά τη διάρκεια παρακολούθησης	Απειλές ναυπλιακής ασφάλειας (security) αναγνωρίζονται ορθώς
-	Βασική γνώση που καθιστά δυνατή την αναγνώριση πιθανών απαιλών ασφάλα ας(security), συμπεριλαμ- βανομένων στα χείων που μπορεί να έχουν σχέση με την παιρατεία και την ένοπλη ληστεία	εγκεκρ μένου προγράμματος σπουδών	
	Βασική γνώση που καθιστά εφικτή αναγνώριση όπλων, επικίνδυνων ουσιών και συσκευών και επίγνωση της ζημίας που μπορεί να προκληθεί		
	Βασική γνώση διαχείρισης πληρο- φοριών που έχουν σχέση με την ασφάλεια και την ασφάλεια επικα- νωνιών		
Κατανόηση ανάγκης κα μεθόδων διατήρησης γνώ- σης και επαγρύπνισης ασφάλειας (security)	Βασική γνώση απα τήσεων εκπαί- δευσης, γυμνασίων και ασκήσεων , σύμφωνα με τις σχετικές συμβάσεις, κώδικες και εγκυκλίους του ΙΜΟ, συμπεριλαμβανομένων εκείνων που αναφέρονται κατά της πειρα- τείας και της ένοπλης ληστείας	Αξιολόγηση αποδεικτικών στα- χείων που αποκτήθηκαν από εγκεκρ μένη εκποίδευση ή κατά τη δάρκεια παρακολούθησης εγκεκρ μένου προγράμματος απουδών	Απατήσες που σχετίζοντα με την εω σχυμένη ναυτλιακή ασφάλεια (sectify) αναγνωρίζονται ορθώς

# Πίνακας Α-VI/6.2 Καθορισμός ελάχιστου προτύπου ι κανότητας ναυτικών με ορισμένα καθήκοντα ασφάλειας (security)

επάρκα α  Τάσρας όρων που παρατί- Γνώση εργασίας όρων και ορισμών Αδολόι	θοδα επίδε ξης ικα- νότητας	Κα τήα α αξιολόγησης ι κα- νότητας
	1	<b> </b>
θενται στο σχέδιο ασφάλειας (security), συμπεριλαμβανομένων στα χείων του μπορεί να έχουν σχέση με την περατεία και την ένοπλη ληστεία θησης	όγηση αποδεκπκών στα- που αποκτήθηκαν από ρμένη εκπαίδευση ή τη διάρκεια παρακολού- ς εγκεκρμένου προγράμ- ς σπουδών	Διαδικασίες και ενέργεις είναι σύμφωνες με τις αρχές που θεσπίζονται από τον ISPS Κώδικα και την SOLAS 1974, όπως τροποπαιήθηκε Νομοθετικές απαιτήσεις που σχετίζονται με την ασφάλεια (securily) αναγνωρίζονται ορθώς Επικαινωνίες στα πλαίσια ευθύνης είναι σαφείνικαι καταινοητές

Στήλη 1	Στήλη 2	Στήλη 3	Στήλη 4
Ικανότητα	Γνώση, κατανόηση κα επάρκε α	Μέθοδα επίδα ξηςικα- νότητας	Κα τήα α αξιολόγησης ικα- νότητας
Αναγνώρ ση κινδύνων και απαλών ασφάλειας (security)	Γνώση εγγράφων αξολόγησης ασφάλειας, περιλαμβανομένης της Διακήρυξης Ασφάλειας Γνώση τεχνικών που χρησιμοπασύνται για να παραβιάσουν τα μέτρα ασφάλειας (security), συμπεριλαμβανομένων εκείνων που χρησιμοπασύνται από περατές και ένοπλους ληστές Γνώση που καθιστούν εφικτή την αναγνώριση πιθανών απελών ασφάλειας (security) Γνώση που καθιστούν εκανή την αναγνώριση όπλων, επικίνδυνων ουσιών και συσκευών και επίγνωση της ζημίας που μπορεί ναι προκαλέσουν Γνώση διαχείρισης πλήθους και τεχνικών ελέγχου, όπου απαιτείται Γνώση χειρισμού πληροφορών που έχουν σχέση με την ασφάλεια	Αξολόγηση αποδεκπκών στα- χείων που αποκτήθηκαν από εγκεκριμένη εκπαίδευση ή κατά τη ἄάρκαα παρακολούθησης εγκεκριμένου προγράμματος σπουδών	Διαδικασίες και ενέργειες αύμφωνα με τις αρχές που θεσπίζονται από τον ISPS Κώδικα και την SOLAS, 1974, όπως τροποτταήθηκε
	(security) και την ασφάλεια (security) επικα νωνιών Γνώση μεθόδων σωματικών ελέγ- χων και διακριτικών επιθεωρήσε- ων		
Ανάληψη τακτικών επιθεω- ρήσεων ασφάλειας (security) πλοίου	Γνώση τεχικών παρακολούθησης απαγορευμένων περιοχών Γνώση ελέγχου πρόσβασης στο πλοίο και στις απαγορευμένες περιοχές του πλοίου Γνώση μεθόδων αποτελεσματικής παρακολούθησης περιοχών καταστρώματος και περιοχών γύρω από το πλοίο Γνώση μεθόδων επιθεώρησης που	Αξολόγηση αποδεκτικών στα- χείων που αποκτήθηκαν από εγκεκρ μένη εκπαίδευση ή κατά τη διάρκεια παρακολούθησης εγκεκριμένου προγράμματος σπουδών	Διαδικασίες και ενέργειες είναι σύμφωνα με τις αρχές που θεσπίζονται από τον ISPS Κώδικα και την Σύμβαση SOLAS, όπως τροποπαήθηκε
	έχουν σχέση με τις αποθήκες φορ- που πλοίου  Γνώση μεθόδων ελέγχου επιβίβα- σης, αποβίβασης και πρόσβασης στο πλοίο ανθρώπων και α επι- πτώσες τους		
Κατάλληλη χρήση του εξο- πλ αμού κα των συστημά- των ασφάλειας (security) εάν υπάρχουν	Γενική γνώση διάφορών τύπων εξοπλισμού και συστημάτων ασφάλας (security) συμπεριλαμβανομένων εκείνων που μπορεί να χρησιμοπαιούνται σε περιπτώσας επιθέσεων από παιρατές και ένοπλους ληστές, συμπεριλαμβανομένων και των περιορισμών τους	Αξιολόγηση αποδεικτικών στα- χείων από εγκεκριμένη εκπαί- δευση ή κατά τη διάρκεια πα- ρακολούθησης εγκεκριμένου προγράμματος σπουδών	Εξοπλισμός και συστήματα επιχαρή σεων ἄιεξάγονται σύμφωνα με πις θεσπισμένες οδηγίες λαιτουργίας εξο πλισμού και λαμβάνοντας υπόψη τοι περιορισμούς του εξοπλισμού και τω συστημάτων Διαδικασίες και ενέργαιες είναι σύμ-
	Γνώση ανάγκης δοκιμής, υπολογισμού και τήρησης συστημάτων και εξοπλισμού ασφάλειας (security), τα αίτερα εν πλω		φωνα με τις αρχές που θεσπίζοντα από τον ISPS Κώδικα και την SOLA 1974, όπως τροποπαήθηκε

#### ΚΕΦΑΛΑΙΟ VII

#### Πρότυπα αναφορικά με την εναλλακτική πιστοποίηση

#### Τμήμα Α-VII/I

Έκδοση εναλλακτικών πιστοποιητικών

- 1 Κάθε υποψήφιος για πιστοποίηση σε επιχειρησιακό επίπεδο σύμφωνα με τις διατάξεις του κεφαλαίου VII του παραρτήματος της Σύμβασης θα απαιτείται να ολοκληρώσει τη σχετική εκπαίδευση και άσκηση και να ανταποκρίνεται στο πρότυπο ικανότητας για όλες τις αρμοδιότητες που μνημονεύονται είτε στον πίνακα Α II/1 ή στον πίνακα Α III/1. Οι δραστηριότητες που καθορίζονται στους πίνακες Α II/1 ή Α -III/1 αντίστοιχα μπορεί να προστεθούν με την προϋπόθεση ότι ο υποψήφιος ολοκληρώνει, όπου απαιτείται, πρόσθετη σχετική επιμόρφωση και εκπαίδευση και ανταποκρίνεται στα πρότυπα ικανότητας που αναφέρονται σε αυτούς τους πίνακες για τις λειτουργίες που αφορούν.
- 2 Κάθε υποψήφιος για πιστοποίηση σε διακητικό επίπεδο ως άτομο που έχει την διοίκηση σε πλοίο 500 ο.χ. και άνω, ή το άτομο στο οποίο θα περιέλθει η διοίκηση τέταιου πλοίου σε περίπτωση ανκανότητας του ατόμου που έχει την διοίκηση, θα απαιτείται εκτός της συμμόρφωσης με το πρότυπο ικανότητας που καθορίζεται στον πίνακα Α ΙΙ/1 να ολοκληρώσει την σχετική επιμόρφωση και εκπαίδευση και να ανταποκρίνεται στο πρότυπα ικανότητας για όλες τις δραστηριότητες που μνημονεύονται στον πίνακα Α ΙΙ/2. Αρμοδιότητες που καθορίζονται στους πίνακες του κεφαλαίου ΙΙΙ αυτού του μέρους μπορεί να προστεθούν με την προϋπόθεση ότι ο υποψήφιος ολοκληρώνει, όπως πρέπει, πρόσθετη σχετική εκπαίδευση και επιμόρφωση και ανταποκρίνεται στα πρότυπα ικανότητας που μνημονεύονται σε αυτούς τους πίνακες για τις αντίσταχες αμοδιότητες.
- 3 Κάθε υποψήφιος για πιστοποίηση σε διακητικό επίπεδο ως το άτομο που θα είναι υπεύθυνο για την μηχανική πρόωση του πλοίου που η ισχύς της κύριας μηχανής πρόωσης είναι 750 KW και άνω ή το άτομο στο οποίο τέταια ευθύνη θα περιέλθει σε περίπτωση ανικατότητας του ατόμου που είναι υπεύθυνο για την μηχανική πρόωση του πλοίου, θα απαιτείται, εκτός της συμμόρφωσης με το πρότυπο ικανότητας που καθορίζεται στον πίνακα Α III/1, να αλοκληρώσει σχετική εκπαίδευση και επιμόρφωση και να πληροί τα πρότυπα ικανότητας για όλες τις αρμοδιότητες που ορίζονται στον πίνακα Α-III/2, όπως απαιτείται. Αρμοδιότητες που καθορίζονται στους πίνακες του κεφαλαίου II αυτού του μέρους μπορεί να προστεθούν με την προϋπόθεση ότι ο υποψήφιος ολοκληρώνει, όπως πρέπει, πρόσθετη σχετική εκπαίδευση και επιμόρφωση και πληροί τα πρότυπα ικανότητας που μνημονεύονται σε αυτούς τους πίνακες για τις αντίστοιχες αρμοδιότητες.
- 4 Κάθε υποψήφιος για πιστοποίηση σε επίπεδο υποστήριξης:
  - .1 στην ναυσιπλοϊα ή στην ναυτική μηχανολογία θα απαιτείται να ολοκληρώνουν σχετική εκπαίδευση και να πληρούν το πρότυπο εκανότητας για αρμοδιότητα που καθορίζεται στον πίνακα Α ΙΙ/4 ή Α ΙΙ- Ι/4. Αρμοδιότητες που καθορίζονται στον πίνακα Α-ΙΙ/4 ή Α-ΙΙ/4 αντίσοιχα μπορεί να προστεθούν με την προϋπόθεση ότι ο υποψήφιος ολοκληρώνει, όπως απαιτείται, επιπρόσθετη σχετική εκπαίδευση και πληροί τα πρότυπα εκανότητας που καθορίζονται σε αυτούς τους πίνακες για τις σχετικές αρμοδιότητες.
  - .2 ως ειδικευμένος ναυτικός καταστρώματος θα απαιτείται, επιπροσθέτως της συμμόρφωσης με το πρότυπο ικανότητας που καθορίζεται στον πίνακα Α-ΙΙ/4, να ολοκληρώσει σχετική εκπαίδευση και να πληροί το πρότυπο ικανότητας για όλες τις αρμοδιότητες που καθορίζονται στον πίνακα Α-ΙΙ/5. Αρμοδιότητες που καθορίζονται στον πίνακα Α-ΙΙΙ/4 ή Α-ΙΙΙ/5 μπορεί να προστεθούν με την προϋπόθεση ότι ο υποψήφιος ολοκληρώνει, όπως χρειάζεται, επιπρόσθετη σχετική εκπαίδευση και πληροί το πρότυπο ικανότητας που καθορίζεται σε εκείνους τους πίνακες για τις σχετικές αρμοδιότητες, και
  - .3 ως ειδιεκευμένος ναυπκός μηχανής θα απτείται, επιπροσθέτως της συμμόρφωσης με το πρότυπο ικανότητας που καθορίζεται στον πίνακα Α-ΙΙΙ/4, να ολοκληρώσει σχεπκή εκπαίδευση και να πληροί το πρότυπο ικανότητας για όλες τις αρμοδιότητες που καθορίζονται στον πίνακα Α-ΙΙΙ/5. Αρμοδιότητες που καθορίζονται στον πίνακα Α-ΙΙ/4 ή Α-ΙΙ/5 μπορεί να προστεθούν με την προϋπόθεση ότι ο υποψήφιος ολοκληρώνει, όπως απαιτείται, επιπρόσθετη σχετική εκπαίδευση και πληροί τα πρότυπα ικανότητας που καθορίζονται σε εκείνους τους πίνακες για σχετικές αρμοδιότητες.

#### Τμήμα Α - VII/2

Πιστοποίηση ναυτικών

1 Σύμφωνα με τις απαιτήσεις του κανανισμού VII/1, παράγραφος 1.3 , κάθε υποψήφιος για πιστοποίηση σύμφωνα με τις διατάξεις του κεφαλαίου VII σε επιχειρησιακό επίπεδο σε αρμοδιότητες που καθορίζονται στους πίνακες Α-ΙΙ/1 και Α-ΙΙ/1:

- .1 θα έχα εγκεκρμένη θαλάσσια υπηρεσία τουλάχιστον 12 μηνών, στην οποία υπηρεσία θα συμπεριλαμβάνεται περίοδος τουλάχιστον έξι μηνών κατά την οποία θα έχει εκτελέσει καθήκοντα μηχανοστασίου υπό την επίβλεψη προσοντούχου αξιωματικού μηχανής και, όπου απαιτείται η αρμοδιότητα ναυσπλοΐας, περίοδος τουλάχιστον έξι μηνών κατά την οποία θα έχει εκτελέσει καθήκοντα τήρησης φυλακής γεφύρας υπό την επίβλεψη προσοντούχου αξιωματικού φυλακής γεφύρας, και
- .2 θα έχει ολοκληρώσει, κατά την διάρκεια της υπηρεσίας αυτής, εγκεκριμένο πρόγραμμα εκπαίδευσης στο πλοίο, που πληροί τις σχετικές απαιτήσεις των τμημάτων Α-ΙΙ/1 και Α-ΙΙΙ/1 και έχει τεκμηριωθεί σε εγκεκριμένο ββλίο εγγραφών εκπαίδευσης.
- 2 Κάθε υποψήφιος για πιστοποίηση σύμφωνα με τις ἄατάξεις του κεφαλαίου VII σε διακητικό επίπεδο σε συνδιασμό με αρμοδιότητες που καθορίζονται στους πίνακες Α-ΙΙ/2 και Α-ΙΙ/2 θα διαθέτει εγκεκριμένη θαλάσσια υπηρεσία σχετική με τις αρμοδιότητες που θα παρατίθενται στην θεώρηση του πιστοπαιητικού ως εξής:
  - .1 για άτομα, εκτός εκείνων που έχουν την διοίκηση ή ευθύνη για την μηχανική πρόωση ενός πλοίου 12 μήνες εκτελώντας καθήκοντα σε επιχειρησιακό επίπεδο που είναι σχετικό με τον κανονισμό III/2 ή III/3 όπως απαιτείται και, όπου απαιτούνται καθήκοντα πλοήγησης σε διακητικό επίπεδο, τουλάχιστον 12 μήνες εκτελώντας καθήκοντα τήρησης φυλακής γεφύρας σε επιχειρησιακό επίπεδο,
  - .2 για εκείνους που έχουν την διοίκηση ή την ευθύνη για την μηχανική πρόωση ενός πλοίου τουλάχιστον 48 μήνες συμπεριλαμβανομένων των διατάξεων της παραγράφου 2.1 αυτού του τμήματος, εκτελώντας, ως αξιωματικός κάτοχος πιστοπαιητικού, καθήκοντα που είναι σχετικά με τις αρμοδιότητες που θα μνημονεύονται στην θεώρηση του πιστοπαιητικού από την οποία 24 μήνες θα διανυθούν εκτελώντας αρμοδιότητες που παρατίθενται στον πίνακα Α-ΙΙΙ/1, και 24 μήνες θα διανυθούν εκτελώντας καθήκοντα που παρατίθενται στους πίνακες Α-ΙΙΙ/1 και Α-ΙΙΙ/2.
- 3 Σύμφωνα με τις απαιτήσεις του κανονισμού VII/1, παράγραφος 1.3, κάθε υποψήφιος για πιστοποίηση σύμφωνα με τις διατάξεις του κεφαλαίου VII σε επίπεδο υποστήριξης σε αρμοδιότητες που καθορίζονται στους πίνακες Α-ΙΙ/4 και Α-ΙΙΙ/4 θα έχει ολοκληρώσει:
  - .1 εγκεκριμένη θαλάσσια υπηρεσία όχι λιγότερη από 12 μήνες εμπειρίας, που αποτελείται από:
    - .1.1 όχι λιγότερη από 6 μήνες σχετική με τήρηση φυλακής ναυσιπλοΐας, και
    - .1.2 όχι λιγότερη από 6 μήνες σχετική με εκτέλεση καθηκόντων μηχανής, ή
  - .2 ειδική εκπαίδευση, είτε εκτός θάλασσας ή σε πλοίο, συμπεριλαμβανομένης εγκεκριμένης περιόδου θαλάσσιας υπηρέσιας που δεν θα είναι λιγότερη από 4 μήνες, αποτελούμενη από:
    - .2.1 όχι λιγότερη από 2 μήνες σχετική με καθήκοντα τήρησης φυλακής ναυσιπλοΐας, κα
    - .2.2 όχι λιγότερη από 2 μήνες σχετική με καθήκοντα μηχανοστασίου,
  - .3 θαλάσσια υπηρεσία, εκπαίδευση και επιμόρφωση που απαιτείται από την παράγραφο 3.1 ή 3.2 θα εκτελείται κάω από την άμεση επίβλεψη ενός κατάλληλα προσοντούχου αξιωματικού ή μέλους πληρώματος.
- 4 Σύμφωνα με τις απαιτήσεις του κανονισμού VII/1, παράγραφος 1.3, κάθε υποψήφιος για πιστοποίηση σύμφωνα με τις διατάξεις του κεφαλαίου VII σε επίπεδο υποστήριξης σε αρμοδιότητες που καθορίζονται στους πίνακες Α-ΙΙ/5 και Α-ΙΙΙ/5, ενώ είναι προσοντούχος να υπηρετεί ως μέλος πληρώματος τήρησης φυλακής ναυσπλοΐας και μηχανοστασίου, θα πληροί τα πρότυπα ικανότητας που καθορίζονται στα τμήματα Α-ΙΙ/5 και Α-ΙΙΙ/5 του Κώδικα STCW και έχει ολοκληρώσε:
  - .1 εγκεκριμένη θαλάσσια υπηρεσία όχι λιγότερη από 30 μήνες, που αποτελείται από:
    - .1.1 όχι λιγότερη από 18 μήνες σχετική με καθήκοντα είδικευμένου ναυτικού καταστώματος, και
    - .1.2 όχι λιγότερη από 12 μήνες σχετική με καθήκοντα ειδικευμένου ναυτικού μηχανής, ή
  - .2 ένα εγκεκριμένο εκπαιδευτικό πρόγραμμα όχι λιγότερο από 18 μήνες εγκεκριμένης θαλάσσιας υπηρεσίας, που αποτελείται από:

- .2.1 όχι λιγότερη από 12 μήνες σχετική με καθήκοντα ειδικευμένου ναυτικού καταστρώματος, κα
- [2.2 όχι λιγότερη από 6 μήνες σχεπκή με καθήκοντα ειδικευμένου ναυπκού μηχανής, ή
- .3 ένα εγκεκριμένο ειδικό εννιαίο πρόγραμμα εκπαίδευσης καταστρώματος και μηχανής, συμπερλαμβανομένης θαλάσσιας υπηρεσίας όχι λιγότερης από 12 μήνες σε ενιαίο τμήμα καταστρώματος και μηχανής, που αποτελείται από:
  - 3.1 όχι λιγότερη από 6 μήνες σχετική με καθήκοντα ειδικευμένου ναυτικού κατααστρώματος, και
  - .3.2 όχι λιγότερη από 6 μήνες σχετική με καθήκοντα ειδικευμένου ναυτικού μηχανής.

#### Τμήμα Α -VII/3

Αρχές που διέπουν την έκδοση εναλλακτικών πιστοποιητικών

(Δεν υπάρχουν διατάξεις)

#### ΚΕΦΑΛΑΙΟ VIII

#### Πρότυπα τήρησης φυλακής

#### Τμήμα A - VIII/1 Ικανότητα ανάληψης καθηκόντων

- 1 Διακήσες θα λαμβάνουν υπόψη τον κίνδυνο λόγω κόπωσης των ναυπκών, ειδικά εκείνων των οποίων τα καθήκοντα αφορούν την ασφάλεια και σίγουρη λειτουργία του πλοίου.
  - 2 Όλα τα πρόσωπα στα οποία ανατίθενται καθήκονται αξιώματικού υπεύθυνου φυλακής ή ως μέλος πληρώματος που αποτελεί τμήμα φυλακής και εκείναι των οποίων τα ανατεθημένα καθήκονται που αφορούν την ασφάλεια, την πρόληψη ρύπανσης και ασφάλειας θα τους διατίθεται περίοδος ανάπαυσης όχι λιγότερη από:
    - .1 το ελάχιστο 10 ώρες ανάπαυση σε οποιαδήποτε περίοδο του 24ώρου, και
    - .2 77ώρες σε περίοδο 7 ημερών
- 3 Οι ώρες ανάπαμσης είναι δυνατόν να διαιρούνται σε δύο το πολύ χρονικές περιόδους, μία εκ των οποίων θα είναι τουλάχιστον 6ώρου διάρκειας και τα διαλείμματα ανάμεσα σε διαδοχικές περιόδους ανάπαυσης δεν θα υπερβαίνουν τις 14 ώρες.
- 4 Οι απαιτήσεις για τις περιόδους ανάπαυσης που καθορίζονται στις παραγράφους 2 και 3 δεν είναι απαραίτητο να τηρούνται σε περίπτωση ανάγκης ή σε άλλες υπερισχύουσες επιχειρησιακές συνθήκες. Γυμνάσια συγκέντρωσης, πυρόσβεσης και σωστικών λέμβων, και γυμνάσια που καθορίζονται από την εθνική νομοθεσία και κανονισμούς και από εθνικά όργανα, θα διεξάγονται κατά τέταιο τρόπο που ελαχιστοπαιεί τη αναταραχή των περιόδων ανάπαυσης και δεν επιφέρει κόπωση.
- 5 Οι Διοικήσεις θα απαιτούν τα προγράμματα βάρδιας να αναρτώνται σε χώρο όπου είναι εύκολα προσβάσμος. Τα προγράμματα θα θεσπίζονται σε έντυπο στην γλώσσα εργασίας ή στις γλώσσες του πλοίου και στην Αγγλική.
- 6 Όταν ο ναυπκός καλείται, όπως όταν ο χώρος του μηχανοστασίου δεν φυλάσσεται, ο ναυπκός θα έχει ως αντιστάθμισμα μια επαρκή περίοδο ανάπαυσης αν η κανονική περίοδος ανάπαυσης διακόπτεται από κλήσεις εργασίας.
- 7 Οι Διακήσεις θα απαιτούν ότι τα ημερολόγια των ημερήσιων ωρών ανάπαυσης ναυτικών να τηρούνται σε τυποπαιημένο έντυπο\*, στη γλώσσα εργασίας ή στις γλώσσσες εργασίας του πλοίου και στην Αγγλική, για να επιτρέψει καταγραφή και πιστοποίηση συμμόρφωσης με τις διατάξεις αυτού του τμήματος. Οι ναυτικοί θα λαμβάνουν αντίγραφα των αρχείων που τους αφορούν, που θα θεωρείται από τον πλοίαρχο ή από ένα άτομο εξουσιοδοτημένο από τον πλοίαρχο και από τους ναυτικούς.
- 8 Τίποτα σε αυτό το τμήμα δεν θα εκπμάται όπι υποσκάπτεται το δικαίωμα του πλαίαρχου να απαιτήσει ο ναυπκός να εκτελέσει ώρες εργασίας απαραίτητες για την άμεση ασφάλεια του πλοίου, των ατόμων του πλοίου ή του φορτίου, ή για τον σκοπό προσφοράς βοήθειας σε άλλα πλοία ή άτομα σε κίνδυνο στη θάλασσα. Αναλόγως, ο πλοίαρχος μπορεί να αναστείλει τις ώρες ανάπαυσης και να απαιτεί ο ναυπκός να εκτελεί ώρες εργασίας απαραίτητες έως να επανέλθει η φυσιολογική κατάσταση, όσο είναι πρακτικό αφού επανέλθει η φυσιολογική κατάσταση, ο πλοίαρχος θα εξασφαλίζει ότι όποια ναυπκοί έχουν εκτελέσει εργασία σε προγραμματισμένη περίοδο ανάπαυσης τους παράχεται επαρκής περίοδος ανάπαυσης.
- 9 Τα Μέρη μπορούν να επιτρέπουν εξαιρέσεις από τις απαιτούμενες ώρες ανάπαυσης στις παραγράφους 2.2 και 3 ανωτέρω με την προϋπόθεση ότι η περίοδος ανάπαυσης δεν είναι λιγότερη από 70 ώρες σε οπαιαδήποτε περίοδο 7 ημερών.

Εξαιρέσεις από την εβδομαδιαία ανάπαυση που προβλέπονται στην παράγραφο 2.2 δεν επιτρέπονται να είναι για περισσότερες από δυο διαδοχικές εβδομάδες. Τα διαλείμματα ανάμεσα στις δυο περιόδους εξαίρεσης δεν θα είναι λιγότερα από δύο κατά τη διάρκεια της εξαίρεσης.

<sup>\*</sup> Ο Οδηγίες του IMO/ ILO γιαι την ανάπτυξη πινάκων εργασιακών διευθετήσεων επί του πλοίου και οι τύποι των αρχείων των ωρών εργασίας και ανάπαυσης των ναυτικών, μπορεί να χρησιμοπα ηθούν.

Οι ώρες ανάπαυσης που προβλέπονται στην παράγραφο 2.1 μπορεί να χωρίζονται σε όχι περισσότερες από τρεις περιόδους, μία από τις οποίες τουλάχιστον διάρκειας 6 ωρών και καμία από τις δυο άλλες περιόδους δεν θα είναι διάρκειας λιγότερο από μία ώρα. Τα διαλείμματα ανάμεσα στις διαδοχικές περιόδους ανάπαυσης δεν θα υπερβαίνουν τις 14 ώρες. Εξαιρέσεις δεν θα παρατείνονται πέρα από το 24ωρο σε οποιαδήποτε περίοδο 7 ημερών.

Οι εξαιρέσεις, όσο είναι δυνατό, θα λαμβάνουν υπόψη τις οδηγίες τιου έχουν σχέση με την πρόληψη κόπωσης στο τμήμα B- VIII/1.

10 Κάθε Διοίκηση θα θεσπίζει, για τον σκοπό πρόληψης κατάχρησης αλκοόλ, ένα όριο όχι ανώτερο από 0,05% επίπεδο αλκοόλ στο αίμα (BAC) ή 0,25 mg/l αλκοόλ στην αναπνοή ή ποσότητα αλκοόλ που οδηγεί σε τέτοια συγκέντρωση αλκοόλ για πλαάρχους, αξιωμαπκούς και άλλους ναυπκούς ενώ εκτελούν ορισμένα καθήκονται ασφάλειας, ασφάλειας (security) και θαλασσίου περιβάλλοντος.

#### Τμήμα Α - VIII/2

Ρυθμίσεις τήρησης φυλακής και αρχές που πρέπει να τηρούνται

#### ΜΕΡΟΣ Ι - ΠΙΣΤΟΠΟΙΗΣΗ

- 1 Ο αξιωματικός που είναι υπεύθυνος φυλακής ναυαιπλοΐας ή φυλακής καταστρώματος θα έχει τα κατάλληλα προσόντα σύμφωνα με τις διατάξεις του κεφαλαίου il ή του κεφαλαίου VII που είναι σχετικά με τα καθήκοντα που αντιστοιχούν σε τήρηση φυλακής ναυαιπλοΐας ή καταστρώματος.
- 2 Ο αξιωματικός που είναι υπεύθυνος φυλακής μηχανής θα έχει τα αντίστοιχα προσόντα σύμφωνα με τις διατάξεις του κεφαλαίου ΙΙΙ ή του κεφαλαίου VII που είναι σχετικά με τα καθήκοντα που αντιστοιχούν σε τήρηση φυλακής μηχανής.

#### ΜΕΡΟΣ 2 -- ΠΡΟΓΡΑΜΜΑΤΙΣΜΟΣ ΤΑΞΙΔΙΟΥ

#### Γενικές απαιτήσεις

- 3 Το ταξίδι που πρόκειτα να πραγματοπαηθεί θα σχεδιάζεται εκ των προτέρων λαμβάνοντας υπόψη όλες τις σχετικές πληροφορίες και οποιαδήποτε πορεία χαραχθεί θα ελέγχεται πρίν από την έναρξη του πλου.
- 4 Ο πρώτος μηχανικός, σε συνεργασία με τον πλοίαρχο, θα καθορίζει εκ των προτέρων τις ανάγκες του πλου πρόκειται να γίνει, λαμβάνοντας υπόψη τις απαιτήσεις σε καύσιμα, νερό, λιπαντικά, χημικά, αναλλώσιμα και λαπά ανταλλακτικά, εργαλεία, εφόδια και όπαιες άλλες απαιτήσεις.

#### Προγραμματισμός πριν από κάθε ταξίδε

5 Πριν από κάθε ταξίδι, ο πλοίαρχος κάθε πλοίου θα εξασφαλίζει ότι η πορεία που πρόκεται να ακολουθηθεί από το λιμάνι απόπλου έως το πρώτο λιμάνι κατάπλου έχει σχεδιασθεί χρησιμοπαώντας επαρκείς και κατάλληλους χάρτες και άλλες ναυτικές εκδόσεις που είναι απαραίτητες για το ταξίδι που πρόκεται να πραγματοποιηθεί που περιέχουν ακριβείς, πλήρεις και ενημερωμένες πληροφορίες όσον αφορά εκείνους τους ναυτιπλοϊκούς περιορισμούς και κινδύνους που είναι μόνιμης ή προβλεπομένης φύσης, και οι οποίοι είναι σχετικοί με την ασφαλή ναυσιπλοΐα του πλοίου.

#### Εξακρίβωση και έκθεση της προγραμματισθείσας πορείας

6 Όταν εξακριβωθεί ο σχεδιασμός της πορείας λαμβάνοντας υπόψη όλες τις σχετικές πληροφορίες η σχεδιασθείσα πορεία θα εκτεθεί με ευκρίνεια σε κατάλληλους χάρτες και θα είναι πάντοτε διαθέσιμη στον αξιωματικό φυλακής που θα εξακριβώνει κάθε πορεία που πρόκειται να ακολουθηθεί πριν αυτή χρησιμοποιηθεί κατά την διάρκεια του πλου.

#### Απόκλι ση από την σχεδιασθείσα πορεία

7 Αν ληφθεί απόφαση κατά την διάρκεια του πλου να αλλάξει το επόμενο λιμάνι κατάπλου της προγραμματοθείσας πορείας, ή εάν είναι απαραίτητο να αποκλείνει σημαντικά το πλοίο από την προγραμματιθείσα πορεία για άλλους λόγους τότε θα προγραμματισθεί τροποποπηθείσα πορεία και αυτό θα γίνει πριν την πραγματοποίηση σημαντικής απόκλισης από την αρχικά προγραμματισθείσα πορεία.

#### ΜΕΡΟΣ 3 – ΑΡΧΕΣ ΤΗΡΗΣΗΣ ΦΥΛΑΚΗΣ ΓΕΝΙΚΑ

- 8 Οι φυλακές θα ἄεξάγονται με βάση τις ακόλουθες αρχές διαχείρισης πόρων γέφυρας και μηχανοστασίου:
  - . .1 κατάλληλες ρυθμίσεις για το προσωπικό τήρησης φυλακής θα εξασφαλίζονται σύμφωνα με τις καταστάσεις,
  - .2 όπαιοι περιορισμοί στα προσόντα ή στην καταλληλότητα των ατόμων θα λαμβάνονται υπόψη όταν αναφέρεται το προσωπικό τήρησης φυλακής,
  - .3 κατανόηση του προσωπικού τήρησης φυλακής σχετικά με τους εξατομικευμένους ρόλους τους, ευθύνες και ομαδικούς ρόλους θα καθιερώνεται,
  - .4 ο πλοίαρχος, ο πρώτος μηχανικός και ο υπεύθυνος αξιωματικός τήρησης φυλακής θα τηρεί κατάλληλη φυλακή, χρησιμοπαώντας όσο πιο αποτελεσματικά τις διαθέσιμες πηγές, όπως πληροφορίες, εγκαταστάσεις/ εξοπλισμός και άλλο προσωπικό,
  - .5 το προσωπικό τήρησης φυλακής θα κατανοεί τις λειτουργίες και το χειρισμό των εγκαταστάσεων/ εξοπλισμού, και θα είναι εξαικειωμένο με τον χειρισμό τους,
  - .6 το προσωπικό τήρησης φυλακής θα κατανοεί τις πληροφορίες και τον τρόπο ανταπόκρισης στις πληροφορίες από κάθε σταθμό/ εγκατάσταση/ εξοπλισμό,
  - .7 πληροφορίες από σταθμό/ εγκαταστάσεις/ εξοπλισμό θα μαράζονται κατάλληλα σε όλο το προσωπικό τήρησης φυλακής,
  - .8 το προσωτικό τήρησης φυλακής θα διατηρεί ανταλλαγή επικανωνιών σε κάθε κατάσταση, και
  - .9 το προσωπικό τήρησης φυλακής θα ενημερώνει τον πλοίαρχο/ πρώτο μηχανικό/ αξιωματικό τήρησης φυλακής χωρίς δισταγμό όταν αμφιβάλλουν σχετικά με την ενέργεια προς συμφέρον της ασφάλειας.

#### ΜΕΡΟΣ 4 -ΤΗΡΗΣΗ ΦΥΛΑΚΗΣ ΣΤΗ ΘΑΛΑΣΣΑ

## Αρχές που εφαρμόζοντα γενικά στην τήρηση φυλακής

- 9 Τα Μέρη θα κατευθύνουν την προσοχή των εταιριών, πλαιάρχων, πρώτων μηχανικών και προσωπικού τήρησης φυλακής στις ακόλουθες αρχές, που θα παρατηρούνται για τη διασφάλιση ότι τηρούνται συνεχώς ασφαλείς φυλακές.
- 10 Ο πλοίαρχος κάθε πλοίου υποχρεούτα να διασφαλίζει ότι οι ρυθμίσεις τήρησης φυλακής είναι επαρκείς για την τήρηση φυλακής ασφαλούς ναυσιπλοΐας ή φορτίου. Σύμφωνα με την γενική κατεύθυνση του πλοιάρχου, οι αξιωματικοί φυλακής ναυσιπλοΐας είναι υπεύθυνοι για την ασφαλή ναυσιπλοΐα του πλοίου κατά τις χρονικές περιόδους ευθύνης τους και θα δείχνουν ιδιαίτερο ενδιαφέρον για την αποφυγή σύγκρουσης και προσάραξης.
- 11 Ο πρώτος μηχανικός κάθε πλοίου υποχρεούται, σε συνεργασία με τον πλοίαρχο, να εξασφαλίσει ότι οι ρυθμίσεις τήρησης φυλακής μηχανοστασίου είναι επαρκείς για να τηρηθεί ασφαλής φυλακή μηχανοστασίου.

#### Προστασία του θαλάσσιου περιβάλλοντος

12 Ο πλοίαρχος, αξιωματικοί και μέλη πληρώματος θα είναι ενήμεραι των σοβαρών επιπτώσεων επιχειρησιακής ή τυχαίας ρύπανσης του θαλασσίου περιβάλλοντος και θα λαμβάνουν όλα τα δυνατά προληπτικά μέτρα για να προληφθεί τέταιου είδους ρύπανση, ιδιαίτερα εντός του πλαισίου των σχετικών διεθνών κανονισμών και κανονισμών λιμένα.

## ΜΕΡΟΣ 4-1 - Αρχές που πρέπε να τηρούνται κατά την τήρηση φυλακής ναυσιπλοΐας

13 Ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας είναι ο εκπρόσωπος του πλαάρχου και είναι κύρια υπεύθυνος πάντοτε για την ασφαλή ναυσιπλοΐα του πλοίου και για τη συμμόρφωση με τους Διεθνείς Κανονισμούς Πρόληψης συγκρούσεων στην Θάλασσα, 1972, όπως έχουν τροποπαηθεί.

#### Οπτήρας

- 14 Κατάλληλος οπτήρας θα τηρείται πάντα σε συμμόρφωση με τον κανονισμό 5 των Διεθνών Κανονισμών Πρόληψης Συγκρούσεων στην Θάλασσα, 1972, όπως έχει τροποπαιηθεί και θα εξυπηρετεί τον σκοπό:
  - .1 διατήρησης συνεχούς κατάστασης επαγρύπνησης οπτικής και ακουστικής καθώς επίσης και με όλα τα άλλα διαθέσιμα μέσα, αναφορικά με οποιεσδήποτε σημαντικές αλλαγές στο επιχειρησιακό περιβάλλον,
  - .2 πλήρους αξιολόγησης της κατάστασης και τον κίνδυνο σύγκρουσης, προσάραξης και άλλων κινδύνων στην ναυσιπλοΐα, και
  - .3 εντοπισμού πλοίων ή αεροσκαφών σε κατάσταση κινδύνου, ναυαγών, ναυαγείων, συντριμιών και άλλων κινδύνων της ασφαλούς ναυσπλοΐας.
- 15 Ο οπτήρας πρέπει να είναι σε θέση να είναι πλήρως συγκεντρωμένος στα καθήκοντά του και δεν θα αναλαμβάνει άλλα καθήκοντα ούτε και θα του ανατίθενται, τα οποία μπορεί να του αποσπάσουν την προσοχή του από τα κύρια καθήκοντά του.
- 16 Τα καθήκοντα του οπτήρα και του πηδαλιούχου είναι ξεχωριστά και ο πηδαλιούχος δεν θα θεωρείται όπ είναι οπτήρας ενώ πηδαλιουχεί, με εξαίρεση τα μικρά πλοία όπου υπάρχει ανεμπόδιστο οπτικό πεδίο κυκλικά από το σημείο που γίνεται η πηδαλιουχία και δεν υπάρχει μείωση της όρασης κατά τη νύχτα ή άλλο εμπόδιο ως προς την τήρηση κατάλληλου οπτήρα. Ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας μπορεί να είναι ο μόνος οπτήρας κατά την διάρκεια της ημέρας με την προϋπόθεση ότι σε αυτή την περίπτωση:
  - .1 η κατάσταση έχει αξιολογηθεί προσεκτικά και έχει διαπιστωθεί χωρίς αμφιβολία ότι είναι ασφαλές να γίνει κάτι τέτοιο,
  - .2 έχουν ληφθεί πλήρως υπόψη όλοι οι σχετικοί παράγοντες στους οποίους περιλαμβάνονται αλλά δεν περιορίζονται στους εξής:
    - καιρικές συνθήκες,
    - ορατότητα,
    - πυκνότητα κυκλοφορίας,
    - εγγύτητα κινδύνων για την ναυσιπλοΐα, και
    - απαραίτητη προσοχή όταν πλέουν σε ή κοντά σε περιοχές διαχωρισμού κυκλοφορίας, και
  - .3 είναι άμεσα διαθέσιμη βοήθεια που θα κληθεί στην γέφυρα όταν αυτό απαιτείται από οπαιαδήποτε αλλαγή της κατάστασης.
- 17 Για να προσδιορισθεί ότι η σύσταση της φυλακής ναυσιπλοΐας είναι επαρκής για να εξασφαλισθεί ότι πάντοτε υπάρχει κατάλληλος οπτήρας, ο πλοίαρχος θα λάβει υπόψη όλους τους σχετικούς παράγοντες περιλαμβανομένων και αυτών που περιγράφονται σε αυτό το τμήμα του Κώδικα, καθώς επίσης και τους παρακάντω-πω-παράγοντες:—
  - .1 ορατότητα, κατάσταση καιρού και θάλασσας,
  - .2 πυκνότητα κυκλοφορίας, και άλλες δραστηριότητες που λαμβάνουν χώρα στην περιοχή όπου το πλοίο ναυσιπλοεί,
  - .3 η πρέπουσα προσοχή όταν το πλοίο ναυσιπλοεί εντός ή κοντά σε περιοχές διαχωρισμού κυκλοφορίας ή όπου ισχύουν άλλα μέτρα όσον αφορά τις πορείες,
  - .4 ο πρόσθετος φόρτος εργασίας που προκαλείται από την φύση των λειτουργιών του πλοίου, άμεσες επιχερησιακές απατήσεις και προσδοκόμεναι ελιγμοί,
  - .5 η καταλληλότητα για εκτέλεση καθηκόντων για να αναλάβει υπηρεσία οποιοδήποτε εκ των μελών του πληρώματος που είναι σε ετοιμότητα, που έχουν ορισθεί ως μέλη τήρησης φυλακής,
  - .6 γνώση και εμπιστοσύνη στην επαγγελματική ικανότητα των αξιωματικών και του πληρώματος του πλοίου,
  - .7 η εμπειρία κάθε αξιωματικού φυλακής ναυσιπλοΐας, και η εξοικίωση αυτού του αξιωματικού με τον εξοπλισμό του πλοίου, διαδικασίες και ικανότητα ελλιγμών,

- .8 δραστηριότητες που λαμβάνουν χώρα στο πλοίο σε οπαιοδήποτε χρονικό διάστημα, συμπεριλαμβανομένων των δραστηριοτήτων ραδιοεπικοινωνιών και της διαθεσιμότητας βοηθείας που θα κληθεί άμεσα στην γέφυρα όταν αυτό είναι απαραίτητο,
- .9 η επιχειρησιακή κατάσταση των οργάνων και διατάξεων ελέγχου της γεφύρας συμπεριλαμβανομένων των συστημάτων συναγερμού,
- .10 έλεγχος πηδαλίου και έλικα και χαρακτηριστικά ελλιγμών πλοίου,
- .11 το μέγεθος του πλοίου και το οπτικό πεδίο που είναι διαθέσιμο από την θέση πηδαλιουχίας,
- .12 η διαμόρφωση της γέφυρας, στην έκταση που αυτή η διαμόρφωση μπορεί να εμποδίσει κάπαιο μέλος της φυλακής να εντοπίσει βλέποντας ή ακούγοντας την οποιαδήποτε εξωτερική εξέλιξη, και
- .13 οπαιοδήποτε άλλο σχετικό πρότυπο, διαδικασία ή οδηγία που είναι σχετική με τις ρυθμίσεις τήρησης φυλακής και καταλληλότητας για εκτέλεση καθηκόντων που έχουν γίνει αποδεκτά από τον Οργανισμό.

#### Ρυθμίσε ς φυλακής

- 18 Όταν αποφασισθεί η σύσταση της φυλακής της γεφύρας, που μπορεί να περιλαμβάνει κατάλληλα προσοντούχα μέλη του πληρώματος, μεταξύ των άλλων, α παρακάτω παράγοντες θα λαμβάνονται υπόψη:
  - .1 ουδέποτε θα παραμένει η γέφυρα χωρίς προσωπικό,
  - .2 καιρικές συνθήκες, ορατότητα και κατά πόσον επικρατεί φως της ημέρας ή σκοτάδι,
  - .3 εγγύτητα κινδύνων της ναυσιπλοΐας που μπορεί να καταστήσουν απαραίτητο για τον αξιωματικό που είναι υπεύθυνος φυλακής να αναλάβει πρόσθετα ναυσιπλοϊκά καθήκοντα,
  - .4 χρήση και επιχειρησιακή κατάσταση των βοηθημάτων ναυσιπλοΐας όπως το ECDIS, το ραντάρ η α ηλεκτρονικές συσκευές προσδιορισμού στίγματος και όποιος άλλος εξοπλισμός που επιδρά στην ασφαλή ναυσιπλοΐα του πλοίου,
  - .5 κατά πόσον το πλοίο διαθέτει αυτόματο πιλότο,
  - .6 κατά πόσον υπάρχουν καθήκοντα ραδιοεπικοινωνιών που πρέπει να εκτελεσθούν,
  - .7 έλεγχοι μη επανδρωμένου μηχανοστασίου, συναγερμοί και δείκτες που υπάρχουν στη γέφυρα, δια-δικασίες για την χρήση τους και περιορισμοί τους, και
  - .8 όποιες-ασυνήθιστες απαιτήσεις που αφορούν την φυλακή ναυσιπλοΐας που μπορεί να προκύψει ως αποτέλεσμα ειδικών επιχειρησιακών καταστάσεων.

#### Ανάληψη φυλακής

- 19 Ο αξιωματικός φυλακής ναυσιτιλοΐας δεν θα παραδώσει την φυλακή σε αντικαταστάτη αξιωματικό εάν έχει λόγους να πιστεύει ότι αυτός δεν είναι σε θέση να εκτελέσει τα καθήκοντα τήρησης φυλακής αποτελεσματικά, και σε τέτοια περίπτωση θα ενημερωθεί ο πλοίαρχος.
- 20 Ο αντικαταστάτης αξιωματικός θα εξασφαλίσει ότι τα μέλη της αναλαμβάνουσας φυλακής είναι πλήρως σε θέση να εκτελούν τα καθήκοντά τους, ιδιαίτερα όσον αφορά την προσαρμογή τους στην δυνατότητα όρασης κατά τη διάρκεια της νύχτας. Αντικαταστάτες αξιωματικοί δεν θα αναλαμβάνουν τήρηση φυλακής έως ότου η όραση τους προσαρμοσθεί με τις καταστάσεις φωτισμού.
- 21 Προτού αναλάβουν φυλακή οι αντικαταστάτες αξιωματικοί θα εξακριβώσουν οι ίδιοι το κατ' εκτίμηση ή το πραγματικό στίγμα του πλοίου και θα επιβεβαιώσουν την πορεία που πρόκειται να ακολουθηθεί, καθώς και την πορεία και ταχύτητα και τους ελέγχους μη επανδρωμένου μηχανοστασίου κατά περίπτωση και θα λάβουν υπόψη τους όποιους κινδύνους για την ναυσιπλοΐα που αναμένεται να αντιμετωπισθούν κατά την διάρκεια της φυλακής τους.
- 22 Οι αντικαταστάτες αξιωματικοί αυτοπροσώπως θα εξακριβώνουν τα παρακάτω:

- .1 τις πάγιες διαταγές και άλλες ειδικές οδηγίες του πλαιάρχου που αφορούν στην ναυσιπλοΐα του πλοίου,
- .2 το στίγμα, πορεία, ταχύτητα και βύθισμα του πλοίου,
- .3 επικρατούσες και αναμενόμενες παλλίρραες, ρεύματα, καιρό, ορατότητα και οι επιπτώσεις αυτών των παραγόντων επί της πορείας και ταχύτητας,
- .4 διαδικασίες για την χρήση των κύριων μηχανών για ελιγμούς όταν αι κύριες μηχανές βρίσκονται υπό τον έλεγχο της γέφυρας,
- .5 ναυσιπλοϊκή κατάσταση, στην οποία περιλαμβάνονται αλλά δεν περιορίζονται:
  - 5.1 στην επιχειρησιακή κατάσταση όλου του εξοπλισμού ασφαλείας και ναυσιπλοΐας που χρησιμοποιείται ή ενδέχεται να χρησιμοποιηθεί κατά την διάρκεια της φυλακής,
  - .5.2 στα σφάλματα της γυροσκοπικής και μαγνητικής πυξίδας,
  - .5.3 στην παρουσία και κίνηση πλοίων που είναι ορατά ή είναι γνωστό ότι βρίσκονται στην περιοχή,
  - .5.4 στις συνθήκες και κινδύνους που ενδέχεται να αντιμετωπισθούν κατά την διάρκεια της φυλακής, και
  - .5.5 στις τεθανές επεπτώσεις της κλίσης, διαγωγής, πυκνότητας του νερού και στην αλλαγή διαγωγής λόγω της κίνησης του πλοίου στην απόσταση μεταξύ τρόπιδας και πυθμένα.
- 23 Εάν οποτεδήποτε πρόκειται να αντικατασταθεί ο αξιωματικός φυλακής ναυσιπλοΐας όταν γίνεται ελλιγμός ή άλλη ενέργεια για να αποφευχθεί κάπαιος κίνδυνος, η αντικατάσταση αυτού του αξιωματικού θα αναβληθεί έως ότου αυτής της φύσης οι ενέργειες έχουν ολοκληρωθεί.

#### Εκτέλεση φυλακής ναυσιπλοΐας

- 24 Ο αξωματικός υπεύθυνος φυλακής ναυσιτιλοΐας:
  - .1 θα εκτελεί φυλακή στη γέφυρα,
  - .2 ουδέποτε θα εγκαταλείπει την γέφυρα χωρίς να αντικατασταθεί σωστά,
  - .3 θα συνεχίζει να είναι υπεύθυνος για την ασφαλή ναυσιπλοΐα του πλοίου, παρά την παρουσία του πλοάρχου στη γέφυρα, έως ότου ειδικά ενημερωθεί ότι ο πλοίαρχος έχει αναλάβει αυτήν την ευθύνη και αυτό έχει γίνει αμοιβαία κατανοητό.
- 25 Κατά την διάρκεια της φυλακής η πορεία που ακολουθείται, το στίγμα και η ταχύτητα θα ελέγχονται σε επαρκώς συχνά χρονικά διαστήματα, χρησιμοπαιώντας τα όπαια ναυσιπλοϊκά βοηθήματα που είναι απαραίτητα και διαθέσιμα, για να εξασφαλισθεί ότι το πλοίο ακολουθεί την προγραμματισμένη πορεία.
- 26 Ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας θα διαθέτει πλήρεις γνώσεις όσον αφορά την θέση και λειτουργία όλου του εξοπλισμού ασφαλείας και ναυσιπλοΐας που υπάρχει στο πλοίο και θα γνωρίζει και θα λαμβάνει υπόψη τους επιχειρησιακούς περιορισμούς αυτού του εξοπλισμού.
- 27 Στον αξιωματικό υπεύθυνο φυλακής ναυσιπλοΐας δεν θα ανατίθενται ούτε θα αναλαμβάνει άλλα καθήκοντα που ενδεχομένως θα επιδράσουν στην ασφαλή ναυσιπλοΐα του πλοίου.
- 28 Όταν χρησιμοποιεί το ραντάρ, ο αξιωματικός φυλακής ναυσιπλοΐας θα έχει κατά νου την ανάγκη να συμμορφούται πάντοτε με τις διατάξεις που αφορούν την χρήση του ραντάρ που περιέχονται στους ισχύοντες Διεθνείς Κανονισμούς Πρόληψης Συγκρούσεων στην Θάλασσα, 1972, όπως τροποποιηθηκε και ισχύει.
- 29 Σε περιπτώσεις ανάγκης, ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας δεν θα διστάσει να χρησιμοποιήσει το πηδάλιο, τις μηχανές και την συσκευή ηχητικών σημάτων. Εν τούταις, έγκαιρη προειδοποίηση όσον αφορά τις προτιθέμενες αλλαγές στην ταχύτητα της μηχανής θα πρέπει να δίνεται όταν αυτό είναι δυνατόν ή να γίνεται αποτελεσματική χρήση των διατάξεων ελέγχου μη επανδρωμένου μηχανοστασίου που υπάρχουν στη γέφυρα σύμφωνα με τις εφαρμοζόμενες διαδικασίες.

- 30 Αξιωματικοί φυλακής ναυσιπλοΐας θα γνωρίζουν τα χαρακτηριστικά χειρισμών του πλοίου τους, συμπεριλαμβανομένων των αποστάσεων κράτησης και πρέπει να εκπιμούν ότι διαφορετικά πλοία ενδεχομένως διαθέτουν διαφορετικά χαρακτηριστικά χειρισμών.
- 31 Θα πρέπει να τηρείται κατά την διάρκεια της φυλακής κατάλληλη καταγραφή των κινήσεων και δραστηριοτήτων που σχετίζονται με την ναυσιπλοΐα του πλοίου.
- 32 Είναι βασικής σημασίας για τον αξιωματικό φυλακής ναυσιπλοΐας να εξασφαλίζει οτι πάντοτε υπάρχει κατάλληλος οπτήρας. Σε πλοίο με ξεχωριστό δωμάτιο χαρτών ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας μπορεί να επισκεφθεί το δωμάτιο χαρτών, όταν αυτό είναι ουσιώδες, για ένα βραχύ χρονικό ἄάστημα για την απαραίτητη εκτέλεση καθηκόντων ναυσιπλοΐας, αλλά πρέπει πρώτα να εξασφαλίσει ότι είναι ασφαλές να το πράξει και ότι υπάρχει οπτήρας.
- 33 Θα γίνονται επιχειρησιακές δοκιμές του εξοπλισμού ναυσιπλοΐας που υπάρχει στο πλοίο όταν αυτό πλέει, όσο συχνά και όσο είναι πρακτικά δυνατόν και όσο α συνθήκες το επιτρέπουν, ιδιαίτερα προτού προκύψουν αναμενόμενες επικίνδυνες καταστάσεις που έχουν επιπτώσεις στην ναυσιπλοΐα. Ανάλογα με την περίπτωση, αυτές α δοκιμές θα καταγράφονται. Τέταιες δοκιμές θα πραγματοποιούνται επίσης πριν από τον κατάπλου και απόπλου.
- 34 Ο αξιωματικός που είναι υπεύθυνος φυλακής ναυσιπλοΐας θα πραγματοπαεί τακτικούς ελέγχους για να εξασφαλίσει:
  - .1 όπ το άτομο που πηδαλιουχεί το πλοίο ή ο αυτόματος πλότος ακολουθούν την σωστή πορεία,
  - .2 το σφάλμα της πυξίδας προσδιορίζεται τουλάχιστον μία φορά σε κάθε φυλακή και, όταν είναι δυνατόν, ύστερα από κάθε σημαντική αλλαγή πορείας, η πρότυπη και η γυροσκοπική πυξίδα συγκρίνονται συχνά και οι συσκευές επανάληψεις ευθυγραμίζονται με την κύρια πυξίδα,
  - .3 το αυτόματο πηδάλιο ελέγχεται με το χέρι τουλάχιστον μια φορά κατά την διάρκεια της φυλακής,
  - .4 τα φώτα ναυσιπλοΐας και σημάτων και ο λοιπός ναυσιπλοϊκός εξοπλισμός λειτουργούν κανονικά,
  - .5 ο εξοπλισμός ραδιοεπικανωνιών λειτουργεί κανονικά σύμφωνα με την παράγραφο 86 αυτού του τμήματος, και
  - .6 οι διατάξεις ελέγχου μη επανδρωμένου μηχανοστασίου, συναγερμοί και δείκτες λειτουργούν κανονικά.
- 35 Ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας θα έχει κατά νου την ανάγκη συμμόρφωσης πάντοτε με τις απαιτήσεις της Διεθνούς Σύμβασης για την Ασφάλεια της Ζωής στην Θάλασσα (SOLAS), 1974. Ο αξιωματικός φυλακής ναυσιπλοΐας θα λάβει υπόψη:
  - .1 την ανάγκη να τοποθετήσει ένα άτομο να πηδαλιουχεί το πλοίο και να θέσει τη πηδαλιουχία υπό ανθρώπινο έλεγχο έγκαιρα ούτως ώστε να μπορεί να αντιμετωπισθεί κατά τρόπο ασφαλή οπααδήποτε ενδεχόμενα επικίνδυνη κατάσταση, και
  - .2 όπ, όταν το πλοίο βρίσκεται στον αυτόματο πιλότο, είναι πάρα πολύ επικίνδυνο να επιτραπεί σε μία κατάσταση να εξελιχθεί σε σημείο που ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας είναι αβοήθητος και αναγκάζεται να χρησιμοποιήσει το άτομο που εκτελεί καθήκοντα οπτήρα προκειμένου να λάβει μέτρα έκτακτης ανάγκης.
- 36 Αξιωματικοί φυλακής ναυσιπλοΐας θα είναι πλήρως εξακειωμένοι με την χρήση όλων των ηλεκτρονικών βοηθημάτων ναυσιπλοΐας που διαθέτει το πλοίο, συμπεριλαμβανομένων των ικανοτήτων και περιορισμών τους, και θα χρησιμοποιούν κάθε ένα από αυτά τα βοηθήματα, όταν πρέπει, και θα έχουν κατά νου ότι το βυθόμετρο είναι ένα πολύτιμο βοήθημα ναυσιπλοΐας.
- 37 Ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας θα χρησιμοπαιεί το ραντάρ οποτεδήποτε υπάρχει ή αναμένεται να υπάρξει περιορισμένη ορατότητα και πάντοτε σε θαλάσσιες περιοχές πυκνής κυκλοφορίας δίνοντας ιδιαίτερη προσοχή στους περιορισμούς του.

<sup>\*</sup> Δείτε κανονισμούς SOLAS V/24, V/25 και V/26.

38 Ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας θα εξασφαλίσει ότι α κλίμακες εμβέλειας που χρησιμοπακούνται αλλάζονται συχνά έτσι ώστε α ήχαι εντοπίζονται όσο το δυνατό πιο νωρίς. Πρέπει να ληφθεί υπόψη ότι ήχαι μικρής έντασης ή ασθενείς μπορεί να μην εντοπισθούν.

39 Οποτεδήποτε το ραντάρ χρησιμοπαιείται, ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας θα επιλέγει την κατάλληλη κλίμακα εμβέλειας και θα παρατηρεί την οθόνη προσεκτικά, και θα εξασφαλίσει ότι η υποτύπωση ή η συστηματική ανάλυση αρχίζει με αρκετή ευχέρεια χρόνου.

- 40 Ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας θα ενημερώνει άμεσα τον πλοίαρχο:
  - .1 αν αντιμετωτείζεται ή αναμένεται περιορισμένη ορατότητα,.
  - .2 αν αι συνθήκες κυκλοφορίας ή αι κινήσεις των άλλων πλοίων προκαλούν προβληματισμό,
  - .3 αν υπάρχει δυσκολία στην τήρηση της πορείας,
  - .4 αν δεν μπορέσει να δει ξηρά, ή σημάδι ναυσιπλοΐας ή να πάρει βυθομετρήσεις κατά την αναμενόμενη χρονική στιγμή,
  - .5 αν, χωρίς να αναμένεται, ξηρά ή σημάδι ναυσιπλοΐας είναι ορατό ή παρατηρείται αλλαγή στις μετρήσεις βυθομέτρησης,
  - .6 όταν γίνει ζημιά στις μηχανές, στις διατάξεις ελέγχου μηχανής πρόωσης, μηχανισμό πηδαλιουχίας ή σε όποιο ουσιώδες εξάρτημα ναυσιπλοΐας, συναγερμό ή δείκτη,
  - .7 αν ο εξοπλισμός ραδιοεπικοινωνιών παρουσιάζει δυσλειτουργίες,
  - .8 υπό δυσμενείς καιρικές συνθήκες, αν βρίσκεται σε αμφιβολία όσον αφορά το ενδεχόμενο πρόκλησης ζημιών από τον καιρό,
  - .9 αν το πλοίο συναντά τον όποιο κίνδυνο για την ναυσιπλοΐα, όπως παγετώνες ή ναυάγιο, και
  - .10 σε οποιαδήποτε άλλη κατάσταση ή αν βρίσκεται σε οποιαδήποτε αμφιβολία.
- 41 Παρά την απαίτηση να ενημερώνει αμέσως τον πλοίαρχο όταν επικρατούν α συνθήκες που προαναφέρθηκαν, ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας, επιπροσθέτως, δεν θα διστάσει να λάβει άμεσα μέτρα για την ασφάλεια του πλοίου, όποτε αυτό το επιβάλουν α καταστάσεις.
- 42 Ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας θα δώσει στο προσωπικό τήρησης φυλακής όλες τις κατάλληλες οδηγίες και πληροφορίες με τις οποίες εξασφαλίζεται η τήρηση ασφαλούς τήρησης φυλακής, συμπεριλαμβανομένου και του κατάλληλου οπτήρα.

## Τήρηση φυλακής υπό διαφορετικές συνθήκες και σε διαφορετικές περιοχές

#### Καλός καιρός

- 43 Ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας θα λαμβάνει συχνές και ακριβείς διοπτεύσεις πυξίδας προσεγγιζόντων πλοίων ως μέσο έγκαιρης ανάγνωρισης κινδύνου σύγκρουσης, και θα έχει κατά νου όπ τέταιος κίνδυνος μπορεί μερικές φορές να υφίσταται ακομή και όταν είναι υπαρκτή αξιόλογη αλλαγή διόπτευσης, ιδιαίτερα όταν προσεγγίζει πολύ μεγάλο πλοίο η ρυμούλκηση ή όταν γίνεται προσέγγιση πλοίου σε κονπινή απόσταση. Ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας θα λάβει έγκαιρα και θετικά μέτρα σε συμμόρφωση με τους ισχύοντες Διεθνείς Κανονισμούς Πρόληψης Συγκρούσεων στην Θάλασσα του 1972, όπως τροποπαιήθηκε και εν συνεχεία να ελέγξει ότι τα μέτρα που λήφθηκαν είχαν το επιθυμητό αποτέλεσμα.
- 44 Σε καλό καιρό, οποτεδήποτε είναι αυτό δυνατόν, ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας θα πραγματοπαιεί πρακτική άσκηση στο ραντάρ.

#### Περιορισμένη ορατότητα

45 Όταν συναντάται ή αναμένεται να απαντηθεί περιορισμένη ορατότητα, η πρώτη ευθύνη του αξιωματικού υπεύθυνου φυλακής ναυσιπλοΐας είναι να συμμορφωθεί με τους σχετικούς κανονισμούς των Διεθνών Κανονισμών Πρόληψης Συγκρούσεων στη Θάλασσα, 1972, όπως τροποποιήθηκε, με ιδιαίτερη προσοχή στην ή-

χηση σημάτων ομίχλης, να κινείται με ασφαλή ταχύτητα και να έχει τις μηχανές έτοιμες για άμεσους ελλιγμούς. Πρόσθετα ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας:

- .1 θα ενημερώσει τον πλοίαρχο,
- .2 θα τοποθετήσει κατάλληλο οπτήρα,
- .3 θα ανάψει τα φώτα ναυσιπλοΐας, και
- .4 θα θέσει σε λειτουργία και θα χρησιμοπαιεί το ραντάρ.

#### Σε ώρες σκότους

46 Ο πλοίαρχος και ο αξιωματικός φυλακής όταν καθορίζουν καθήκοντα οπτήρα θα δίνουν την προσήκουσα σημασία στον εξοπλισμό γεφύρας και στα διαθέσιμα για χρήση βοηθήματα ναυσιπλοΐας, τους περιορισμούς τους, τις διαδικασίες και τα προστατευτικά μέτρα που εφαρμόζονται.

Παράκτιες και θαλάσσιες περιοχές πυκνής κυκλοφορίας

47 Θα χρησιμοπαείται ο χάρτης με τη μεγαλύτερη κλίμακα που υπάρχει στο πλοίο και είναι κατάλληλος για την περιοχή και έχει διορθωθεί με τις τελευταίες διαθέσιμες πληροφορίες. Διοπτεύσεις θα λαμβάνονται κατά συχνά διαστήματα, οποτεδήποτε το επιτρέπουν οι συνθήκες η διόπτευση θα πραγματοπαιείται με περισσότερες της μιάς μεθόδους. Όταν χρησιμοπαιείται ECDIS, κατάλληλη χρήση κωδικού (κλίμακας) ηλεκτρονικών χαρτών ναυσιπλοΐας θα χρησιμοπαιείται και το στίγμα του πλοίου θα ελέγχεται από ανεξάρτητα μέσα καθορισμού στίγματος σε κατάλληλα διαστήματα.

48 Ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας θα εντοπίζει θετικά όλα τα σχετικά σημάδια ναυσιπλοΐας.

#### Ναυσιπλοΐα με επιβαίνοντα πλοηγό

49 Παρά τα καθήκοντα και υποχρεώσεις των πλοηγών, η παρουσία τους στο πλοίο δεν απαλάσσει τον πλοίαρχο η τον αξιωματικό υπεύθυνο φυλακής ναυσιπλοΐας από τα καθήκοντά τους και υποχρεώσεις τους όσον αφορά την ασφάλεια του πλοίου. Ο πλοίαρχος και ο πλοηγός θα ανταλλάξουν πληροφορίες όσον αφορά τις διαδικασίες ναυσιπλοΐας, τοπικές συνθήκες και τα χαρακτηριστικά του πλοίου. Ο πλοίαρχος και/ ή ο αξιωμαπικός υπεύθυνος φυλακής θα συνεργαστούν στενά με τον πλοηγό και θα τηρούν ακριβή έλεγχο όσον αφορά την θέση και κίνηση του πλοίου.

50 Αν υπάρχει οποιαδήποτε αμφιβολία όσον αφορά τις ενέργειες ή προθέσεις του πλοηγού, ο αξωματικός υπεύθυνος φυλακής ναυσιπλοΐας θα ζητήσει διευκρινήσεις από τον πλοηγό και, αν έχει ακόμη αμφιβολίες θα ενημερώσει αμέσως τον πλοίαρχο και θα λάβει όποια μέτρα είναι απαραίτητα πριν από την άφιξη του πλοιάρχου.

#### Πλοίο σε αγκυροβόλιο

51 Αν ο πλοίαρχος το θεωρεί απαραίτητο, θα υπάρχει συνεχώς φυλακή ναυσιπλοΐας όταν το πλοίο βρίσκεται αγκυροβολημένο, ο αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας:

- .1 θα προσδιορίζει και αποτυπώνει το στίγμα του πλοίου στον κατάλληλο χάρτη το συντομότερο πρακτικά δυνατόν,
- .2 όταν α συνθήκες το επιτρέπουν, θα ελέγχει σε επαρκώς συχνά χρονικά διαστήματα κατά πόσον το πλοίο παραμένει ασφαλώς αγκυροβολημένο λαμβάνοντας διοπτεύσεις σταθερών σημείων ναυσιπλοίσας ή εύκολα αναγνωρίσημων σημείων της ξηράς,
- .3 θα εξασφαλίσει ότι υπάρχει κατάλληλος οπτήρας,
- .4 θα εξασφαλίσει ότι γίνονται περιοδικά περίπολα επιθεώρησης στο πλοίο,
- .5 θα παρατηρεί τις μετεωρολογικές και παλιρροιακές συνθήκες και την κατάσταση της θάλασσας,
- .6 θα ενημερώνει τον πλοίαρχο και θα λαμβάνει όλα τα απαραίτητα μέτρα αν το πλοία σύρει την άγκυρα,

- .7 θα εξασφαλίσε ότι η κατάσταση ετοιμότητας των κύριων μηχανών και άλλων μηχανημάτων είναι σύμφωνη με τις οδηγίες του πλοιάρχου,
- .8 αν η ορατότητα επιδεινώνεται θα ενημερώσει τον πλοίαρχο,
- .9 θα εξασφαλίσει ότι το πλοίο εκθέτει τα σωστά φώτα και σχήματα και ότι τα κατάλληλα ηχητικά σήματα ηχούν σύμφωνα με τους κανονισμούς που εφαρμόζονται, και
- .10 λαμβάνει μέτρα για την προστασία του περιβάλλοντος από ρύπανση από το πλοίο και συμμορφώνεται με τους κανονισμούς ρύπανσης που εφαρμόζονται.

#### Μέρος 4-2 - Αρχές που πρέπε να τηρούντα κατά την τήρηση φυλακής μηχανής

- 52 Ο όρος φυλακή μηχανής, όπως χρησιμοπαείται στα μέρη 4-2, 5-2 και 5-4 αυτού του τμήματος εννοεί είτε ένα άτομο ή ομάδα προσωπικού που απαρτίζει την φυλακή ή την χρονική περίοδο ευθύνης για αξιωματικό κατά την διάρκεια της οποίας η φυσική παρουσία στους χώρους μηχανοστασίου αυτού του αξιωματικού μπορεί να απαιτείται ή να μην απαιτείται.
- 53 Ο αξιωματικός υπεύθυνος φυλακής μηχανής είναι ο αντιπρόσωτιος του πρώτου μηχανικού και είναι πάντοτε ο πρώτος υπεύθυνος για την ασφαλή και αποδοτική λειτουργία και συντήρηση του μηχανοστασίου που επιδρούν στην ασφάλεια του πλοίου και είναι υπεύθυνος για την επιθεώρηση, λειτουργία και δοκιμή, όπως απαιτείται, όλων των μηχανημάτων και εξοπλισμού που εμπίπτει στην ευθύνη της φυλακής μηχανής.

#### Ρυθμίσε ς τήρησης φυλακής

- 54 Η σύσταση της φυλακής μηχανής, θα είναι πάντοτε επαρκής για να εξασφαλισθεί η ασφαλής λειτουργία όλων των μηχανημάτων που επιδρούν στην λειτουργία του πλοίου, είτε αυτό είναι σε αυτόματο ή χειροκίνητο τρόπο λειτουργίας και θα είναι η κατάλληλη για τις επικρατούσες καταστάσεις και συνθήκες.
- 55 Όταν αποφασίζεται η σύσταση της φυλακής μηχανής, που μπορεί να περιλαμβάνει κατάλληλα προσοντούχα μέλη του πληρώματος, θα λαμβάνονται υπόψη, *μεταξύ άλλων*, τα παρακάτω κριτήρια:
  - .1 ο τύπος του πλοίου και ο τύπος και κατάσταση των μηχανημάτων,
  - .2 η επαρκής πάντοτε επιτήρηση των μηχανημάτων που επιδρούν στην ασφαλή λειτουργία του πλοίου,
  - .3 οι όποιοι ειδικοί τρόποι λειτουργίας που επιβάλλονται από συνθήκες όπως ο καιρός, πάγος, μολυσμένο νερό, ρηχά νερά, καταστάσεις ανάγκης, περιορισμός ζημιών ή ελάττωση της ρύπανσης,
  - .4 τα προσόντα και η εμπειρία της φυλακής μηχανής,
  - ,5 η-ασφάλεια της-ζωής, πλοίου,-φορτίου και-λιμένα,-και-προστασία του περιβάλλοντος,
  - .6 η τήρηση των διεθνών, εθνικών και τοπικών κανονισμών, και
  - .7 η τήρηση των συνήθων λειτουργιών του πλοίου.

#### Ανάληψη φυλακής

- 56 Ο αξιωματικός υπεύθυνος φυλακής μηχανής δεν θα παραδώσει την φυλακή στον αντικαταστάτη αξιωματικό αν έχει λόγους να πιστεύει ότι αυτός προφανώς δεν είναι σε θέση να εκτελεί τα καθήκοντα τήρησης φυλακής αποτελεσματικά, και σε τέταια περίπτωση θα ενημερωθεί ο πρώτος μηχανικός.
- 57 Ο αντικαταστάτης αξωματικός της φυλακής μηχανής θα εξασφαλίσει ότι τα μέλη της αντικαθιστώσας φυλακής είναι προφανώς πλήρως ικανά να εκτελέσουν τα καθήκοντά τους αποτελεσματικά.
- 58 Προτού αναλάβουν την φυλακή μηχανής οι αντικαταστάτες αξιωματικοί θα εξακριβώσουν τουλάχιστον τα παρακάτω:
  - .1 τις πάγιες διαταγές και ειδικές οδηγίες του πρώτου μηχανικού που είναι σχετικές με την λειτουργία των μηχανών και συστημάτων του πλοίου,

- .2 τη φύση όλων των εργασιών που βρίσκονται σε εξέλιξη σε μηχανήματα και συστήματα, το προσωπικό που εμπλέκεται και οι ενδεχόμενοι κίνδυνοι,
- .3 το επίπεδο, και όπου ισχύει, η κατάσταση του νερού ή καταλοίπων στους υδροσυλέκτες, δεξαμενές έρματος, δεξαμενές καταλοίπων, δεξαμενές εφεδρικές, δεξαμενές πόσιμου νερού, δεξαμενές λυμάτων και των όποιων ειδικών απαιτήσεων για την χρήση και διάθεση των περιεχομένων τους,
- .4 την κατάσταση και στάθμη καυσίμων στις εφεδρικές δεξαμενές, δεξαμενές κατακάθησης, δεξαμενές ημερησίας κατανάλωσης και σε άλλες εγκαταστάσεις αποθήκευσης καυσίμων,
- .5 πς όπαιες ειδικές απαιτήσεις όσον αφορά τις απορρίψεις του συστήματος υγιενής,
- .6 την κατάσταση και τρόπο λειτουργίας των διαφόρων κύριων και βοηθητικών συστημάτων, συμπεριλαμβανομένου του συστήματος διανομής ηλεκτρικής ισχύος,
- .7 όπου εφαρμόζεται, η κατάσταση του εξοπλισμού παρακολούθησης και της κονσόλας ελέγχου, και ποιά μηχανήματα δουλεύουν χειροκίνητα,
- .8 όπου εφαρμόζεται, η κατάσταση και τρόπος λειτουργίας των αυτομάτων ελέγχων του λέβητα όπως τα συστήματα ελέγχου φλόγας, τα συστήματα ελέγχου ορίων, τα συστήματα ελέγχου καύσης, τα συστήματα ελέγχου παροχής καυσίμου και λοιπού εξοπλισμού που είναι σχετικός με την λειτουργία των ατμολεβήτων,
- .9 τις όποιες ενδεχόμενες δυσμενείς καταστάσεις που είναι αποτέλεσμα δυσμενών και ρικών συνθηκών, πάγου, μολυσμένων ή ρηχών νερών,
- .10 τους όπαιους ειδικούς τρόπους λειτουργίας που επιβάλλονται από βλάβες του εξοπλισμού ή από δυσμενείς συνθήκες στο πλοίο,
- .11 τις αναφορές των μελών πληρώματος του μηχανοστασίου που είναι σχετικές με τα καθήκοντα που τους έχουν ανατεθεί,
- .12 τη διαθεσιμότητα συσκευών πυρόσβεσης, και
- .13 την κατάσταση συμπλήρωσης του ημερολογίου μηχανής.

#### Εκτέλεση φυλακής μηχανής

- 59 Ο αξιωματικός υπεύθυνος φυλακής μηχανής θα εξασφαλίσει ότι οι καθιερωμένες ρυθμίσεις τήρησης φυλακής τηρούνται και ότι κατόπιν εντολών, τα μέλη πληρώματος μηχανής, αν αποτελούν τμήμα της φυλακής μηχανής βοηθούν για την ασφαλή και αποδοτική λειτουργία της μηχανής πρόωσης και του βοηθητικού εξοπλισμού.
- 60 Ο αξιωματικός υπεύθυνος φυλακής μηχανής θα συνεχίζει να είναι υπεύθυνος για τις εργασίες στο χώρο μηχανοστασίου, παρά την παρουσία του πρώτου μηχανικού στους χώρους μηχανοστασίου, έως ότου συγκεκριμμένα ενημερωθεί ότι ο πρώτος μηχανικός έχει αναλάβει την ευθύνη αυτή και ότι αυτό έχει γίνει αμαιβαία κατανοητό.
- 61 Όλα τα μέλη της φυλακής μηχανής θα είναι εξαικειωμένα με τα καθήκοντα τηρήσεως φυλακής που τους έχουν ανατεθεί. Επιπροσθέτως κάθε μέλος θα έχει γνώσεις επί των παρακάτω όσον αφορά το πλοίο επί του οποίου υπηρετεί:
  - .1 την χρήση των καταλήλων συστημάτων ενδοσυνεννόησης,
  - .2 πς οδούς διαφυγής από τον χώρο του μηχανοστασίου,
  - 3 τα συστήματα συναγερμού του μηχανοστασίου και να είναι σε θέση να ξεχωρίσει τους διάφορους συναγερμούς με ειδική αναφορά στο συναγερμό μέσων πυρόσβεσης, και
  - .4 τον αριθμό, θέση και τύπους εξοπλισμού πυρόσβεσης και εξοπλισμού ελέγχου ζημιών στους χώρους μηχανοστασίου μαζί με την χρήση τους και τα διάφορα προληπτικά μέτρα ασφαλείας που πρέπει να τηρούνται.

- 62 Αν κάπαιο μηχάνημα δεν λειτουργεί ορθώς, αναμένεται να παρουσιάσει βλάβη ή απαιτεί ειδική συντήρηση, αυτό θα σημειώνεται καθώς επίσης και οι όποιες ενέργειες που έχουν ήδη γίνει. Θα γίνουν σχέδια για τις όποιες περαιτέρω ενέργειες, αν απαιτούνται.
- 63 Όταν οι χώρα μηχανοστασίου βρίσκονται σε επανδρωμένη κατάσταση, ο μηχανικός που είναι υπεύθυνος φυλακής μηχανής, θα είναι πάντοτε σε εταιμότητα και τκανός να χειρισθεί τον εξοπλισμό πρόωσης σε ανταπόκριση των αναγκών για αλλαγές σε κατεύθυνση και ταχύτητα.
- 64 Όταν οι χώροι μηχανοστασίου βρίσκονται σε περιοδικά μη επανδρωμένη κατάσταση, ο ορισμένος αξιωματικός υπηρεσίας που είναι υπεύθυνος φυλακής μηχανής θα είναι άμεσα διαθέσιμος και σε εταιμότητα να προσέλθει στο χώρο μηχανοστασίου.
- 65 Όλες οι διαταγές της γέφυρας θα εκτελούνται άμεσα. Αλλαγές στην κατεύθυνση ή ταχύτητα των κύριων μονάδων πρόωσης θα καταγράφονται, με εξαίρεση όταν η Αρχή έχει ορίσει ότι το μέγεθος ή τα χαρακτηριστικά του συγκεκριμμένου πλοίου καθιστούν πρακτικά αδύνατη τέτοιου είδους καταγραφή. Ο αξιωματικός υπεύθυνος φυλακής μηχανής θα εξασφαλίσει ότι οι έλεγχοι της κυρίας μονάδας πρόωσης, όταν βρίσκεται στο χεροκίνητο τρόπο λειτουργίας, βρίσκονται υπό συνεχή παρακολούθηση υπό συνθήκες εταιμότητας ή ελλιγμών.
- 66 Θα πρέπει να δίνεται η προσήκουσα προσοχή στην συντήρηση και υποστήριξη όλων των μηχανημάτων, συμπεριλαμβανομένων των συστημάτων μηχανικών, ηλεκτρικών, ηλεκτρονικών, υδραυλικών και αυτών που λειτουργούν με πεπιεσμένο αέρα, των συσκευών ελέγχου τους και τον σχεπικό εξοπλισμό ασφαλείας, όλων των συστημάτων εξοπλισμού εξυπηρέτησης, ενδιαίτησης και η καταγραφή αποθεμάτων και χρήση ανταλλακτικών.
- 67 Ο πρώτος μηχανικός θα εξασφαλίσει ότι ο αξιωματικός υπεύθυνος φυλακής μηχανής ενημερώνεται σχετικά με την προληπτική συντήρηση, έλεγχο ζημιών ή εργασίες επισκευής που πρόκειται να πραγματοπαηθούν κατά την διάρκεια της φυλακής. Ο αξιωματικός υπεύθυνος φυλακής μηχανής θα είναι υπεύθυνος για την απομόνωση, παράκαμψη και ρύθμιση όλων των μηχανημάτων που βρίσκονται υπό την ευθύνη της φυλακής μηχανής έτσι ώστε να λειτουργούν και θα καταγράφει τις εργασίες που πραγματοπαούνται.
- 68 Όταν το μηχανοστάσιο τίθεται σε κατάσταση εταιμότητας, ο αξιωματικός υπεύθυνος φυλακής μηχανής θα εξασφαλίσει ότι όλα τα μηχανήματα και εξοπλισμός που μπορεί να χρησιμοπαιηθούν κατά την διάρκεια των ελλιγμών βρίσκονται σε άμεση κατάσταση εταιμότητας και είναι διαθέσιμη επαρκής εφεδρική ισχύς για τον μηχανισμό πηδαλιουχίας και άλλες απαιτήσεις.
- 69 Σε αξιωματικούς υπεύθυνους φυλακής μηχανής δεν θα τους ανατίθενται, ούτε θα αναλαμβάνουν καθήκοντα που θα μπορούσαν να εμπλακούν με τα εποπτικά τους καθήκοντα ως προς το κύριο σύστημα πρόωσης και τα βοηθητικά μηχανήματα. Θα έχουν την κύρια εγκατάσταση πρόωσης και τα βοηθητικά συστήματα υπό σταθερή επιτήρηση έως ότου κανονικά αντικατασταθούν, και κατά περιοδικά διαστήματα θα επιθεωρούν τα μηχανήματα για τα οποία είναι υπεύθυναι. Θα εξασφαλίζουν επίσης ότι γίνονται επισρκείς επισκέψεις στους χώρους μηχανοστασίου και πηδαλιουχίας με σκοπό την παρατήρηση και αναφορά δυσλειτουργιών μηχανημάτων ή εκτεταμένων βλαβών εκτελώντας ή διευθύνοντας ρυθμίσεις ρουτίνας, απαιτούμενη συντήρηση και οποιεσδήποτε άλλες απαραίτητες εργασίες.
- 70 Αξιωματικοί υπεύθυνα φυλακής μηχανής θα ζητούν από οπαιοδήποτε άλλο μέλος της φυλακής μηχανής να τους ενημερώνει για ενδεχόμενες επικίνδυνες καταστάσεις που μπορεί να έχουν δυσμενείς επιπτώσεις σε μηχανήματα ή να θέσουν σε κίνδυνο την ασφάλεια της ζωής ή την ασφάλεια του πλοίου.
- 71 Ο αξωματικός υπεύθυνος φυλακής μηχανής θα εξασφαλίσει ότι ο χώρος μηχανοστασίου επιτηρείται και θα ρυθμίσει για αντικαταστάτες σε περίπτωση ανικανότητας οποιουδήποτε εκ του προσωπικού φυλακής μηχανής. Η φυλακή μηχανής δεν θα αφήσει τους χώρους μηχανοστασίου χωρίς επίβλεψη κατά τρόπο που θα μπορούσε να εμποδίσει την χειροκίνητη λειτουργία της εγκατάστασης του μηχανοστασίου ή των ακροφυσίων.
- 72 Ο αξιωματικός υπεύθυνος φυλακής μηχανής θα λάβει τα απαραίτητα μέτρα για να περιορίσει τις επιπτώσεις ζημιών που προέρχονται από εκτεταμένη βλάβη εξοπλισμού, πυρκαγιά, κατάκλιση, σύγκρουση, προσάραξη ή άλλη αιτία.
- 73 Προτού απαλλαγεί των καθηκόντων του ο αξιωματικός υπεύθυνος φυλακής μηχανοστασίου θα εξασφαλίσει ότι όλα τα γεγονότα που σχετίζονται με την κύρια μηχανή και τα βοηθητικά μηχανήματα και τα οποία συνέβησαν κατά την διάρκεια της φυλακής έχουν καταγραφεί.

74 Ο αξιωματικός υπεύθυνος φυλακής μηχανής θα συνεργασθεί με όποιον μηχανικό που είναι επιφορτισμένος με εργασίες συντήρησης κατά την διάρκεια όλων των εργασιών προληπτικής συντήρησης, ελέγχου ζημιών ή επισκευών. Αυτό συμπεριλαμβάνει αλλά δεν είναι απαραίτητο να περιορίζεται στα:

- .1 απομόνωση και παράκαμψη μηχανημάτων επί των οποίων θα γίνουν εργασίες,
- .2 ρύθμιση της υπολοίπου εγκατάστασης για να λειτουργεί επαρκώς και με ασφάλεια κατά την περίοδο συντήρησης,
- .3 καταγραφή, στο ημερολόγιο μηχανής ή σε άλλο κατάλληλο έγγραφο, του εξοπλισμού στον οποίο εκτελούνται εργασίες και του εμπλεκόμενου προσωπικού, και παιά μέτρα ασφαλείας ελήφθησαν και από παιόν, προς όφελος των αντικαταστατών αξιωματικών και για λόγους αρχείου, και
- .4 δοκιμή και θέση σε λειτουργία, όταν είναι απαραίτητο, μηχανήματος ή εξοπλισμού που έχει επισκευασθεί.

75 Ο αξιωματικός υπεύθυνος φυλακής μηχανής θα εξασφαλίσει ότι όποιος εκ των μελών του πληρώματος μηχανής που εκτελεί καθήκοντα συντήρησης είναι διαθέσιμος για να βοηθήσει στη χειροκίνητη λειτουργία μη-χανημάτων σε περίπτωση βλάβης αυτοματοποιημένου εξοπλισμού.

76 Ο αξιωματικός υπεύθυνος φυλακής μηχανής πρέπει να έχει κατά νου ότι αλλαγές στην ταχύτητα, που είναι αποτέλεσμα δυσλειτουργίας μηχανήματος, ή όποια ακυβερνησία, μπορεί να θέσει σε κίνδυνο την ασφάλεια του πλοίου και την ζωή στην θάλασσα. Η γέφυρα θα ενημερωθεί άμεσα, σε περίπτωση πυρκαγιάς, και για όποια επικείμενη ενέργεια στους χώρους μηχανημάτων που μπορεί να προκαλέσει την μείωση της ταχύτητας του πλοίου, επικείμενη ακυβερνησία, σταμάτημα της κύριας εγκατάστασης του πλοίου ή όποια μεταβολή στην παραγωγή ηλεκτρικής ισχύος ή παρόμοια απειλή στην ασφάλεια. Αυτή η ειδοποίηση, όπου είναι δυνατόν, θα ολοκληρώνεται προτού πραγματοποιηθούν οι αλλαγές, προκειμένου να δοθεί στην γέφυρα ο μέγιστος δυνατός χρόνος για να λάβει τα όποια απαραίτητα μέτρα για να αποφευχθεί ενδεχόμενο ναυτικό ατύχημα.

77 Ο αξιωματικός υπεύθυνος φυλακής μηχανής θα ενημερώσει τον πρώτο μηχανικό χωρίς καθυστέρηση:

- .1 όταν συμβεί ζημία ή δυσλειτουργία της μηχανής που μπορεί να είναι τέταιας φύσεως ώστε να θέσει σε κίνδυνο την ασφαλή λειτουργία του πλοίου,
- .2 όταν συμβαίνει όποια δυσλειτουργία η οποία, πιστεύεται, μπορεί να προκαλέσει ζημία ή εκτεταμένη ζημία της μηχανής πρόωσης, βοηθητικών μηχανημάτων ή συστημάτων παρακολούθησης και ελέγχου, και
- .3 σε οποιαδήποτε κατάσταση ανάγκης, ή αν βρίσκεται σε αμφιβολία ως προς την απόφαση ή τα μέττρα που θα πάρει.

78 Παρά την απαίτηση να ενημερωθεί ο πρώτος μηχανικός στις παραπάνω καταστάσεις, ο αξιωματικός υπεύθυνος φυλακής μηχανής δεν θα διστάσει να λάβει άμεσα μέτρα για την ασφάλεια του πλοίου των μηχανών του και του πληρώματος όταν οι συνθήκες το απαιτούν.

79 Ο αξιωματικός υπεύθυνος φυλακής μηχανής θα δώσει στο προσωπικό φυλακής όλες τις κατάλληλες οδηγίες και πληροφορίες που θα εξασφαλίσουν την τήρηση ασφαλούς φυλακής μηχανής. Συντήρηση ρουτίνας μηχανημάτων που πραγματοπαείται ως εργασίες ως τμήμα τήρησης ασφαλούς φυλακής θα αποτελέσουν τμήμα ενός αναπόσπαστου μέρους της ρουτίνας της φυλακής. Λεπτομερής συντήρηση επισκευών που περλαμβάνει επισκευές ηλεκτρικού, μηχανολογικού, υδραυλικού, με πεπιεσμένο αέρα ή εφαρμοστέου ηλεκτρονκού εξοπλισμού σε όλο το πλοίο θα πραγματοπαείται με την επίγνωση του αξιωματικού υπεύθυνου φυλακής μηχανής, και του πρώτου μηχανικού. Αυτές οι επισκευές θα καταγράφονται.

## Τήρηση φυλακής μηχανοστασίου υπό ἄ αφορετικές συνθήκες και σε ἃ αφορετικές περιοχές

Περιορισμένη ορατότητα

80 Ο αξιωματικός υπεύθυνος φυλακής μηχανής θα εξασφαλίσει ότι είναι διαθέσιμη μόνιμη πίεση αέρα ή ατημού για τα ηχητικά σήματα και ότι πάντοτε οι εντολές της γέφυρας που αφορούν αλλαγές σε ταχύτητα και πορεία εφαρμόζονται αμέσως και πρόσθετα, τα βοηθητικά μηχανήματα που χρησιμοποιούνται για την εκτέλεση ελιγμών είναι άμεσα διαθέσιμα.

Παράκτιες και θαλάσσιες περιοχές πυκνής κυκλοφορίας

81 Ο αξιωματικός υπεύθυνος φυλακής μηχανής θα εξασφαλίσει ότι όλα τα μηχανήματα που εμπλέκονται στους ελιγμούς του πλοίου μπορεί άμεσα να τεθούν σε χειροκίνητο τρόπο λειτουργίας όταν ενημερώνεται ότι το πλοίο είναι σε περιοχή που έχει συνωστισμό. Ο αξιωματικός υπεύθυνος φυλακής μηχανής θα εξασφαλίσει επίσης ότι είναι διαθέσιμη επαρκής εφεδρική ισχύς για πηδαλιουχία και για άλλες απαιτήσεις ελιγμών. Πηδαλιουχία έκτακτης ανάγκης και λαιπός βοηθητικός εξοπλισμός θα είναι διαθέσιμος για άμεση λειτουργία.

#### Πλοίο σε αγκυροβόλιο

- 82 Σε μη προστατευμένο αγκυροβόλιο ο πρώτος μηχανικός θα συμβουλευθεί τον πλοίαρχο όσον αφορά το κατά πόσο θα ή δεν θα διατηρήσει την ίδια φυλακή όπως εν πλώ.
- 83 Όταν ένα πλοίο είναι αγκυροβολημένο σε ανακτό αγκυροβόλιο ή σε οπαιαδήποτε άλλη κατάσταση που ισοδυναμεί με κατάσταση "εν πλώ", ο αξωματικός μηχανής υπεύθυνος φυλακής θα εξασφαλίσει ότι:
  - .1 τηρείται επαρκής τήρηση φυλακής,
  - .2 γίνεται επιθεώρηση όλων των μηχανημάτων τα οποία βρίσκονται σε λειτουργία και σε κατάσταση εταιμότητας,
  - .3 η κύρια μηχανή και τα βοηθητικά μηχανήματα διατηρούνται σε κατάσταση εταιμότητας σύμφωνα με τις διαταγές από την γέφυρα,
  - .4 λαμβάνοντα μέτρα για την προστασία του περιβάλλοντος από ρύπανση από το πλοίο και υπάρχει συμμόρφωση με τους εφαρμοζόμενους κανονισμούς πρόληψης ρύπανσης, και
  - .5 όλα τα συστήματα ελέγχου ζημιών και πυρόσβεσης βρίσκονται σε ετοιμότητα.

## Μέρος 4-3 - Αρχές που πρέπει να τηρούνται κατά την τήρηση φυλακής ραδιοεπικοινωνιών

#### Γενικές Διατάξεις

84 Οι Αρχές θα εφιστούν την προσοχή των εταιριών, πλαιάρχων και προσωπικού που τηρεί φυλακή ραδιοεπικοινωνιών ώστε να συμμορφώνεται με τις παρακάτω διατάξεις για να εξασφαλιστεί ότι τηρείται επαρκής φυλακή ραδιοεπικοινωνιών ασφαλείας ενώ το πλοίο είναι εν πλώ. Για τη συμμόρφωση με τον Κώδικα, θα λαμβάνονται υπόψη οι Κανονισμοί Ραδιοεπικοινωνιών.

#### Ρυθμίσε ς Φυλακής

- 85 Όταν αποφασίζονται οι ρυθμίσεις για την φυλακή ραδιοπικοινωνιών, ο πλοίαρχος κάθε ποντοπόρου πλοίου θα:
  - .1 εξασφαλίσει ότι η φυλακή ραδιοετικοινωνιών τηρείται σύμφωνα με τις σχετικές διατάξεις των Κανονισμών Ραδιοετικοινωνιών και της Σύμβασης SOLAS,
  - .2 εξασφαλίσει ότι τα πρωταρχικά καθήκοντα τήρησης φυλακής ραδιοεπικανωνιών δεν επηρεάζονται δυσμενώς από παρακολούθηση ραδιοεπικανωνιών που δεν είναι σχετικές με την ασφαλή κίνηση του πλοίου και την ασφάλεια της ναυσιπλοΐας, και
  - .3 λαμβάνει υπόψη τον εξοπλισμό ραδιοεπικοινωνιών που διαθέτει το πλοίο και την επιχειρησιακή του κατάσταση.

#### Εκτέλεση φυλακής ραδιοετιικα νωνιών

- 86 Ο χειριστής ραδιοεπικοινωνιών που εκτελεί καθήκοντα τήρησης φυλακής ραδιοεπικοινωνιών:
  - .1 θα εξασφαλίσει ότι διατηρείται φυλακή στις συχνότητες που καθορίζονται στους Κανονισμούς Ραδιοεπικοινωνιών και την Σύμβαση SOLAS, και
  - .2 ενώ εκτελεί υπηρεσία, θα ελέγχει κατά τακτά διαστήματα τη λειτουργία του εξοπλισμού ραδιοεπικανωνών και τις πηγές ενέργειάς του και θα αναφέρει στον πλοίαρχο όποια παρατηρούμενη βλάβη αυτού του εξοπλισμού.

87 Θα πρέπει να τηρούνται οι απαιτήσεις των Κανονισμών Ραδιοεπικοινωνιών και της Σύμβασης SOLAS για την τήρηση κατά περίπτωση ημερολογίου ραδιοτηλεγραφίας ή ραδιοεπικοινωνιών.

88 Η τήρηση εγγραφών των ραδιοεπικανωνιών σύμφωνα με τις απαιτήσεις των Κανονισμών Ραδιοεπικανωνιών και της Σύμβασης SOLAS είναι ευθύνη του χειριστού ραδιοεπικανωνιών που ορίζεται ως ο έχων την πρωταρχική ευθύνη των ραδιοεπικανωνιών κατά την διάρκεια περιστατικών ανάγκης. Τα παρακάτω θα καταγράφονται, καθώς επίσης και οι χρόνοι που έλαβαν χώρα:

- .1 περίληψη των ραδιοεπικοινωνιών κινδύνου, επείγοντος και ασφαλείας,
- .2 σημαντικά περιστατικά που είναι σχετικά με την υπηρεσία ραδιοετικοινωνών,
- .3 όπου απαιτείται, το στίγμα του πλοίου τουλάχιστον μία φορά την ημέρα, και
- .4 περίληψη της κατάστασης του εξοπλισμού ραδιοεπικανωνιών συμπεριλαμβανομένων των πηγών ενέργειάς του.

89 Οι εγγραφές ραδιοετικανωνών θα φυλάσσονται στην θέση από όπου πραγματοποιούνται οι επικοινωνίες ανάγκης, και θα βρίσκονται στην διάθεση:

- .1 του πλαιάρχου για επιθεώρηση, και
- .2 για επιθεώρηση από όποιο εξουσιοδοτημένο αξιωματούχο της Αρχής και από όποιο κατάλληλα εξουσιοδοτημένο αξιωματικό που ασκεί έλεγχο σύμφωνα με το άρθρο Χ της Σύμβασης.

#### ΜΕΡΟΣ 5 - ΤΗΡΗΣΗ ΦΥΛΑΚΗΣ ΣΕ ΛΙΜΑΝΙ

#### Αρχές που εφαρμόζονται σε όλες της φυλακές

#### Γενι κά

90 Σε οπαοδήποτε πλοίο το οποίο έχει προσδεθεί ή έχει αγκυροβολήσει με ασφάλεια υπό συνήθεις συνθήκες σε λιμάνι, ο πλοίαρχος θα κανονίσει για την τήρηση της κατάλληλης και αποτελεσματικής φυλακής με σκοπό την ασφάλεια. Ειδικές απαιτήσεις μπορεί να είναι απαραίτητες για ειδικούς τύπους πλοίων, συστήματα πρόωσής ή βοηθητικά μηχανήματα και για πλοία που μεταφέρουν επιβλαβή, επικίνδυνα, τοβκά ή πολύ εύφλεκτα υλικά ή άλλους ειδικούς τύπους φορτίου.

#### Ρυθμίσα ς φυλακής

- 91 Οι ρυθμίσεις τήρησης φυλακής όταν το πλοίο είναι σε λιμάνι πάντοτε θα είναι επαρκείς ως προς:
  - .1 την εξασφάλιση της ασφάλειας της ζωής, του λιμανιού και του περιβάλλοντος και την ασφαλή λειτουργία-όλων-των-μηχανημάτων που σχετίζονται με χειρισμό φορτίου,
  - .2 την τήρηση ἄεθνών, εθνικών και τοπικών κανονισμών, και
  - .3 την τήρηση της τάξης και των συνήθης ρουτίνας στο πλοίο.
- 92 Ο πλοίαρχος θα αποφασίσει την σύσταση και διάρκεια της φυλακής καταστρώματος που θα εξαρτάται από τις συνθήκες πρόσδεσης, του τύπου του πλοίου και του χαρακτήρα των καθηκόντων.
- 93 Αν ο πλοίαρχος το θεωρεί απαραίτητο, προσοντούχος αξιωματικός θα είναι υπεύθυνος φυλακής καταστρώματος.
- 94 Ο απαραίτητος εξοπλισμός θα διευθετηθεί κατά τέτσιο τρόπο ώστε να επιτρέπει επαρκή τήρηση φυλακής.
- 95 Ο πρώτος μηχανικός κάθε πλοίου, σε συνεργασία με τον πλοίαρχο, θα εξασφαλίσει ότι οι ρυθμίσεις τήρησης φυλακής μηχανοστασίου είναι επαρκείς για τήρηση ασφαλούς φυλακής μηχανοστασίου ενώ το πλοίο βρίσκεται στο λιμάνι. Όταν αποφασίσει την σύσταση της φυλακής μηχανοστασίου, η οποία μπορεί να περιλαμβάνει κατάλληλα εκ των μελών του πληρώματος μηχανής άτομα, τα παρακάτω είναι μεταξύ εκείνων τα οποία πρέπει να ληφθούν υπόψη:

- .1 σε όλα τα πλοία ισχύος πρόωσης 3000 KW και άνω πάντοτε θα υπάρχει αξιωματικός μηχανής υπεύθυνος φυλακής μηχανοστασίου,
- .2 σε πλοία μικρότερης των 3000 KW ισχύος πρόωσης, μπορεί κατά την κρίση του πλαάρχου κα σε συνεργασία με τον πρώτο μηχανικό, να μην υπάρχει αξιωματικός υπεύθυνος φυλακής μηχανής, κα
- .3 δεν θα δοθούν εντολές σε αξιωματικούς τήρησης φυλακής, ούτε θα αναλάβουν οποιαδήποτε εργασία, ενώ είναι υπεύθυναι φυλακής μηχανοστασίου που έρχεται σε συγκρουση με τα κύρια καθήκοντά τους επίβλεψης του συστήματος μηχανών του πλοίου.

#### Ανάληψη Φυλακής

96 Αξιωματικοί φυλακής καταστρώματος ή μηχανοστασίου δεν θα παραδώσουν φυλακή στον αντικαταστάτη αξιωματικό αν έχουν οποιοδήποτε λόγο να πιστεύουν ότι ο τελευταίος δεν είναι σε θέση να εκτελέσει καθήκοντα τήρησης φυλακής αποτελεσματικά και σε αυτή την περίπτωση ο πλοίαρχος ή ο πρώτος μηχανικός πρέπει να ενημερώνονται σχετικά. Οι αντικαταστάτες αξιωματικοί φυλακής καταστρώματος ή μηχανοστασίου θα εξασφαλίζουν ότι όλα τα μέλη της φυλακής τους είναι προφανώς πλήρως ικανά να εκτελέσουν αποτελεσματικά τα καθήκοντα τους.

97 Αν, κατά την στιγμή που γίνεται η παράδοση φυλακής καταστρώματος ή μηχανής, πραγματοπαείται σημαντική λειτουργία, αυτή θα ολοκληρωθεί από τον παραδίδοντα αξιωματικό, εκτός αν διαταχθεί διαφορετικά από τον πλοίαρχο ή τον πρώτο μηχανικό.

## Μέρος 5-1 - Ανάληψη φυλακής καταστρώματος

98 Πριν την ανάληψη καθήκοντος τήρησης φυλακής καταστρώματος, ο αντικαταστάτης αξιωματικός θα ενημερωθεί από τον αξιωματικό που είναι υπεύθυνος φυλακής καταστρώματος ως προς τα ακόλουθα:

- .1 το βάθος του νερού στην προβλήτα, το βύθισμα του πλοίου, τη στάθμη και το χρόνο άμπωτης και παλίρροιας, ασφάλιση των ναυδετών, ρύθμιση των αγκυρών και της αλυσίδας της άγκυρας και άλλα χαρακτηριστικά ελλιμενισμού που είναι σημαντικά για την ασφάλεια του πλοίου, κατάσταση των κύριων μηχανών και διαθεσιμότητα τους για χρήση σε κατάσταση ανάγκης,
- .2 όλες τις εργασίες που πρόκειται να εκτελεσθούν στο πλοίο, τη φύση, ποσότητα και κατανομή του φορτίου που φορτώνεται ή παραμένει και οποιοδήποτε κατάλοι πο παραμένει στο πλοίο ύστερα από την εκφόρτωση του πλοίου,
- .3 στάθμη νερού στις σεντίνες και στις δεξαμενές έρματος,
- .4 τα σήματα ή φώτα που χρησιμοποιούνται ή ηχούν,
- .5 τον αριθμό των μελών του πληρώματος που απαιτείται να βρίσκονται επί του πλοίου και την παρουσία οπαιωνδήποτε άλλων ατόμων στο πλοίο,
- .6 κατάσταση των συσκευών πυρόσβεσης,
- .7 οποιοιδήποτε εδικοί κανονισμοί λιμένα,
- .8 ειδικές και πάγιες διαταγές πλοιάρχου,
- .9 γραμμές επικανωνίας διαθέσιμες μεταξύ πλοίου και προσωπικού ξηράς, συμπεριλαμβανομένων των λιμενικών αρχών, σε περίπτωση που προκύψει έκτακτη ανάγκη ή σε περίπτωση που απαιτείται βοήθεια,
- .10 όπαες καταστάσεις σημαντικές για την ασφάλεια του πλοίου, του πληρώματος και του φορτίου την προστασία του θαλασσίου περιβάλλοντος από ρύπανση, και
- .11 τις διαδικασίες ενημέρωσης της αρμόδιας αρχής για περιβαλλοντική ρύπανση που είναι αποτέλεσμα των δραστηριστήτων του πλοίου.
- 99 Οι αντικαταστάτες αξιωματικοί πριν αναλάβουν την ευθύνη της φυλακής καταστρώματος θα επιβεβαιώνουν ότι:
  - .1 η ασφάλεια των ναυδετών και της αλυσίδας άγκυρας είναι επαρκής,

- .2 τα κατάλληλα σήματα ή φώτα ηχούν ή σημαίνονται κανονικά,
- .3 τηρούνται μέτρα ασφάλειας και κανονισμοί πυροπροστασίας,
- .4 είναι επαρκώς ενήμερα επί της φύσης οποιουδήποτε επιβλαβούς ή επικινδύνου φορτίου που φορτώνεται ή εκφορτώνεται και τα κατάλληλα μέτρα που πρέπει να ληφθούν σε περίπτωση οποιασδήποτε διαρροής ή πυρκαγιάς,
- .5 καμμία εξωτερική συνθήκη ή κατάσταση θέτει σε κίνδυνο το πλοίο και ότι το πλοίο δεν θέτει σε κίνδυνο άλλους.

#### Μέρος 5-2 – Ανάληψη φυλακής μηχανοστασίου

100 Πριν αναλάβει τήρηση φυλακής, ο αντικαταστάτης αξιωματικός θα ενημερωθεί από τον αξιωματικό υπεύθυνο φυλακής μηχανής ως προς:

- .1 τις ισχύουσες εντολές της ημέρας, οποιεσδήποτε αδικές εντολές που έχουν σχέση με τις λατουργίες του πλοίου, δραστηριότητες συντήρησης, επισκευές μηχανημάτων του πλοίου ή του εξοπλισμού ελέγχου,
- .2 τη φύση όλων των εργασιών που εκτελούνται στα μηχανήματα και συστήματα του πλοίου, το προσωπικό που εμπλέκεται και τους πιθανώς κινδύνους,
- .3 το επίπεδο και κατάσταση, όπου αυτό εφαρμόζεται, του νερού ή υπολειμμάτων στις σεντίνες, δεξαμενές έρματος, εφεδρικές δεξαμενές και ειδικές απαιτήσεις για την χρήση και διάθεση των περιεχομένων τους,
- .4 οποιεσδήποτε αδικές απαιτήσεις που αφορούν στις απορρίψεις του συστήματος υγιεινής,
- .5 την κατάσταση και κατάσταση εταιμότητας των φορητών πυροσβεστικών συσκευών και μόνιμων ττυροσβεστικών εγκαταστάσεων και συστημάτων ανίχνευσης πυρκαγιάς,
- .6 το εξουσιοδοτημένο προσωπικό επισκευών που βρίσκεται στο πλοίο και ασχολείται σε δραστηρότητες μηχανικής φύσεως, ο τόπος εργασίας τους και δραστηρότητες επισκευών και άλλα εξουσιοδοτημένα άτομα και το απαιτούμενο πλήρωμα,
- .7 τους όπαιους κανογισμούς λιμένα όσον αφορά τις απορρίψεις του πλοίου, απαιτήσεις πυρόσβεσης και εταιμότητας του πλοίου ιδιαίτερα πρίν από πιθανές δυσμενείς καιρικές συνθήκες,
- .8 πς διαθέσιμες γραμμές επικανωνίας μεταξύ πλοίου και προσωπικού ξηράς, συμπεριλαμβανομένων των λιμενικών αρχών, σε περίπτωση που προκύψει έκτακτη ανάγκη ή απαίτησης βοήθειας,
- .9 όποιες άλλες συνθήκες σημαντικές για την ασφάλεια του πλοίου, του πληρώματος, του φορτίου ή προστασίας του περιβάλλοντος από ρύπανση, και
- .10 α διαδικασίες ενημέρωσης της αρμόδιας αρχής επί της ρύπανσης του περιβάλλοντος που προέρχετα από δραστηριότητες μηχανοστασίου.

101 Αντικαταστάτες αξιωματικοί, πριν αναλάβουν ευθύνη φυλακής θα ικανοποιηθούν ότι είναι πλήρως ενημερωμένοι από τον αξιωματικό που αντικαθίστατα, όπως περιγράφεται ανωτέρω, και:

- .1 να είναι εξακειωμένοι με υπάρχουσες και πιθανές πηγές ισχύος, θερμότητας και φωπισμού και κατανομής τους,
- .2 να γνωρίζει την διαθεσιμότητα και κατάσταση των καυσίμων του πλοίου, λιπαντικών και όλες τις παροχές νερού, και
- .3 να είναι έταιμος να προεταιμάσει το πλοίο και τα μηχανήματά του, όσο αυτό είναι δυνατόν, για κατάσταση εταιμότητας ή έκτακτης ανάγκης όπως απαιτηθεί.

#### Μέρος 5-3 - Εκτέλεση φυλακής καταστρώματος

- 102 Ο αξιωματικός φυλακής καταστρώματος θα:
  - .1 πραγματοποιεί γύρους για να επιθεωρεί το πλοίο κατά κατάλληλα διαστήματα,
  - .2 δίνει ιδιαίτερη προσοχή για:
    - .2.1 την κατάσταση και ασφάλιση της σκάλας επιβίβασης/ αποβίβασης, της αλυσίδας της άγκυρας και ναυδετών, ιδιαίτερα κατά την αλλαγή της παλίρραιας και σε προβλήτες με μεγάλη άνοδο και πτώση, αν είναι απαραίτητο, λαμβάνοντας μέτρα για να εξασφαλίσει ότι βρίσκονται στην συνήθη εργασιακή κατάσταση,
    - .2.2 το βύθισμα, το κενό υπό την τρόπιδα και τη γενική κατάσταση του πλοίου, να αποφύγει επικίνδυνη κλίση ή διαγωγή κατά την διάρκεια χειρισμών στο φορτίο ή κατά την διάρκεια ερματισμού,
    - .2.3 τον καιρό και την κατάσταση θάλασσας,
    - .2.4 την τήρηση όλων των κανονισμών που αφορούν την ασφάλεια και πυροπροστασία,
    - .2.5 τη στάθμη νερού στις σεντίνες και δεξαμενές,
    - .2.6 όλα τα άτομα που βρίσκονται στο πλοίο και το τμήμα στο οποίο βρίσκοντα, ιδιαίτερα αυτά που είναι σε απομεμακρισμένους ή περίκλειστους χώρους, και
    - .2.7 την έκθεση και βυθομέτρηση, όπου πρέπει, σημάτων και φώτων.
  - .3 σε δυσμενείς καιρικές συνθήκες, ή όταν ληφθεί ειδοποίηση για θύελλα, να λάβει τα απαραίτητα μέττρα για την προστασία του πλοίου, των επιβαινόντων και του φορτίου,
  - .4 να λάβει κάθε προληπικό μέτρο για να προληφθεί η ρύπανση του περιβάλλοντος από το πλοίο,
  - .5 σε κατάσταση έκτακτης ανάγκης που απειλεί την ασφάλεια του πλοίου, να καλέσε συναγερμό, να πληροφορήσει τον πλοίαρχο, να λάβει όλα τα δυνατά μέτρα για να προληφθεί ζημία στο πλοίο, το φορτίο του και τους επιβαίνοντες, και, αν είναι απαραίτητο, να ζητήσει βοήθεια από αρχές στην ξηρά ή από γειτονικά πλοία,
  - .6 να είναι ενήμερος της κατάστασης ευστάθειας του πλοίου έτσι ώστε σε περίπτωση πυρκαγιάς, η πυροσβεστική υπηρεσία ξηράς να ενημερωθεί επί της κατά προσέγγιση ποσότητας νερού που μπορεί να αντληθεί στο πλοίο χωρίς αυτό να τεθεί σε κίνδυνο,
  - .7 να προσφέρει βοήθεια σε πλοία ή άτομα που κινδυνεύουν,
  - .8 να λάβει τα απαραίτητα προληπτικά μέτρα για να προληφθούν ατυχήματα ή ζημία όταν πρόκειται να λειτουργήσουν οι έλικες, και
  - .9 να καταχωρεί στο κατάλληλο ημερολόγιο όλα τα σημαντικά γεγονότα που έχουν επιπτώσεις στο πλοίο.

#### Μέρος 5-4 - Εκτέλεση φυλακής μηχανής

- 103 Αξιωματικοί υπεύθυναι της φυλακής μηχανής θα δίνουν ιδιαίτερη προσοχή:
  - .1 στην τήρηση όλων των διαταγών, επιχειρησιακών διαδικασιών και κανονισμών που αφορούν τις επικίνδυνες καταστάσεις και την πρόληψή τους σε όλες τις περιοχές της ευθύνης τους,
  - .2 στα όργανα και τα συστήματα ελέγχου, παρακολούθησης όλων των παροχών ισχύος, τμημάτων και συστημάτων που είναι σε λειτουργία,
  - .3 στις τεχνικές, μεθόδους και διαδικασίες που είναι απαραίτητες για να προληφθεί παράβαση των κανονισμών ρύπανσης των τοπικών αρχών, και

.4 στην κατάσταση των σεντινών.

#### 104 Αδιωματικοί υπεύθυνα της φυλακής μηχανής:

- .1 σε καταστάσεις ανάγκης, θα καλούν συναγερμό όταν, κατά την γνώμη τους, η κατάσταση το απαιτεί, και θα λαμβάνουν όλα τα δυνατά μέτρα για να προληφθεί ζημία στο πλοίο, στους επιβαίνοντες και φορτίο,
- .2 θα είναι ενήμερα των αναγκών του αξιωματικού καταστρώματος που έχουν σχέση με τον εξοπλισμό που απαιτείται για την φόρτωση ή εκφόρτωση και των πρόσθετων απαιτήσεων έρματος και άλλων συστημάτων ελέγχου της ευστάθειας του πλοίου,
- .3 θα πραγματοποιούν συχνές επιθεωρήσεις για να προσδιορίσουν την πιθανή δυσλειτουργία εξοπλομού ή βλάβη και θα λαμβάνουν άμεσα μέτρα αποκατάστασης για να εξασφαλίζουν την ασφάλεια του πλοίου, των εργασιών στο φορτίο, του λιμένος και του περιβάλλοντος,
- .4 θα εξασφαλίζουν ότι λαμβάνονται τα απαραίτητα προληπτικά μέτρα εντός της περιοχής ευθύνης τους για να προληφθούν ατυχήματα ή ζημία σε διάφορα ηλεκτρικά, ηλεκρονικά, υδραυλικά, με πεπιεσμένο αέρα και μηχανικά συστήματα του πλοίου, και
- .5 θα εξασφαλίζουν ότι όλα τα σημαντικά γεγονότα που επηρεάζουν την λειτουργία, ρύθμιση ή επισκευή των μηχανημάτων του πλοίου καταγράφονται κατά εκανοποιητικό τρόπο.

## Μέρος 5-5 - Φυλακή σε λιμένα σε πλοία που μεταφέρουν επιβλαβή φορτία

#### Γενικά

105 Ο πλοίαρχος κάθε πλοίου που μεταφέρει επιβλαβή, είτε εκρηκτικά, εύφλεκτα, τοξικά φορτία, που θέτουν σε κίνδυνο την υγεία ή είναι ρυπογόνα για το περιβάλλον, θα εξασφαλίζει ότι τηρούνται οι ρυθμίσεις ασφαλούς φυλακής. Σε πλοία που μεταφέρουν επιβλαβές φορτίο χύδην, αυτό θα επιτευχθεί με την διαθεσιμότητα στο πλοίο κατάλληλου προσοντούχου αξιωματικού ή αξιωματικών και μελών του πληρώματος κατά περίπτωση, ακόμη και όταν το πλοίο είναι προσδεδεμένο με ασφάλεια ή με ασφάλεια αγκυροβολημένο σε λιμάνι.

106 Σε πλοία που μεταφέρουν επιβλαβές φορτίο, όχι σε χύδην κατάσταση, ο πλοίαρχος θα λάβει πλήρως υπόψη του τη φύση, ποσότητα, συσκευασία και σταβασία του επιβλαβούς φορτίου και των όπα ων ειδικών συνθηκών στο πλοίο, τόσο εν πλω όσο και στην ξηρά.

### Μέρος 5.6 -Τήρηση φυλακής φορτίου

107 Αξιωματικοί που έχουν την ευθύνη σχεδιασμού και διεξαγωγής χειρισμού φορτίου θα εξασφαλίζει ότι τέτοιες επιχειρήσεις διεξάγονται με ασφάλεια μέσω έλεγχο συγκεκριμένων κινδύνων, συμπεριλαμβανομένου όταν εμπλέκεται προσωπικό που δεν ανήκει στο πλοίο.»

2 Το τμήμα Β του Κώδικα Εκπαίδευσης, Έκδοσης πιστοποιητικών και Τήρησης Φυλακής Ναυτικών (STCW) αντικαθίσταται από το ακόλουθο:

#### «ΜΕΡΟΣ Β

## Συνι στώμενες οδηγίες που αφορούν τις διατάξας της Σύμβασης STCW και του παραρτήματος της

#### Ει σαγωγή

- 1 Το τμήμα αυτό του Κώδικα STCW περιέχει τις συνιστώμενες οδηγίες που σκοπό έχουν να βοηθήσουν τα Μέρη της Σύμβασης STCW και αυτούς που εμπλέκονται στην εκτέλεση, εφαρμογή και επιβολή των μέτρων της, για να δώσουν στην Σύμβαση πλήρη και τέλεια ισχύ κατά ομαιόμορφο τρόπο.
- 2 Τα προτεινόμενα μέτρα δεν είναι υποχρεωτικά και τα παραδείγματα που δίνονται έχουν σκοπό να δείξουν πως μπορεί να υπάρξει συμμόρφωση με ορισμένες απαιτήσεις της Σύμβασης. Εν τούτας, οι συστάσεις γενικά εκπροσωπούν μία προσέγγιση, στα υπό εξέταση θέματα, που έχει εναρμονισθεί μέσω διαλόγου εντός του ΙΜΟ, περιλαμβάνοντας, όπου πρέπει, διαβουλεύσεις με το Διεθνή Οργανισμό Εργασίας, τη Διεθνή Ένωση Τηλεπικανωνιών και τον Παγκόσμιο Οργανισμό Υγείας.
- 3 Η τήρηση των συστάσεων που περιέχονται σε αυτό το μέρος θα βοηθήσει τον Οργανισμό στην επίτευξη του σκοπού της διατήρησης των υψηλότερων δυνατών προτύπων ικανότητας όσον αφορά τα πληρώματα όλων των εθνικοτήτων και τα πλοία όλων των σημαιών.
- 4. Σε αυτό το μέρος δίνονται οδηγίες όσον αφορά ορισμένα άρθρα της Σύμβασης, πέραν των οδηγιών σε ορισμένους κανονισμούς αυτού του Παραρτήματος. Η αρίθμηση των τμημάτων αυτού του μέρους επομένως αντιστοιχεί με εκείνη των άρθρων και των κανονισμών της Σύμβασης. Όπως στο μέρος Α, το κείμενο κάθε τμήματος μπορεί να διαιρεθεί σε αριθμημένες παραγράφους, αλλά αυτή η αρίθμηση είναι μοναδική μόνο για αυτό το κείμενο.

### ΟΔΗΓΙΕΣ ΟΣΟΝ ΑΦΟΡΑ ΤΙΣ ΔΙΑΤΑΞΕΙΣ ΤΩΝ ΑΡΘΡΩΝ

Τμήμα Β-Ι

Οδηγίες όσον αφορά τις γενικές υποχρεώσεις σύμφωνα με αυτή την Σύμβαση

(Δεν υπάρχουν διατάξεις)

Τμήμα B-II

Οδηγίες όσον αφορά τους ορισμούς και τις διευκρινήσεις

- 1 Οι ορισμοί που περιέχονται στο άρθρο ΙΙ της Σύμβασης, και α ορισμοί και διευκρινήσεις που περιέχονται στον κανονισμό Ι/1 του παραρτήματος της, ισχύουν εξ' ίσου με τους όρους που χρησιμοπαιούνται στα μέρη Α και Β αυτού του Κώδικα. Συμπληρωματικοί ορισμοί που μπορεί να βρίσκουν εφαρμογή μόνο στις διατάξεις αυτού του Κώδικα περιέχονται στο τμήμα Α-Ι/1.
- 2 Ο ορισμός του πιστοποιητικού που εμφανίζεται στο άρθρο ΙΙ (c) προβλέπει τρία ενδεχόμενα:
  - .1 η Αρχή μπορεί να εκδώσει το πιστοποιητικό,
  - .2 η Αρχή μπορεί να έχει εξουσιοδοτήσει την έκδοση του πιστοπαητικού, ή
  - .3 η Αρχή μπορεί να αναγνωρίζει πιστοποιητικό που εκδόθηκε από άλλο Τμήμα, όπως προβλέπεται στον κανονισμό I/10.

Τμήμα B-III

Οδηγίες όσον αφορά την εφαρμογή της Σύμβασης

- 1 Ενώ ο ορισμός αλιευτικό που περιέχεται στο άρθρο ΙΙ, παράγραφος (h), εξαιρεί τα σκάφη που χρησιμοποιούνται για να αλιεύουν ψάρια, φάλαινες, φώκιες, θαλάσαια άλογα ή άλλους ζωντανούς οργανισμούς της θάλασσας από την εφαρμογή της Σύμβασης, πλοία που δεν χρησιμοποιούνται στην δραστηριότητα αυτή δεν είναι δυνατόν να τύχουν αυτής της εξαίρεσης.
- 2 Η σύμβαση εξαιρεί όλα τα ξυλινα πλοία πρωτόγονης κατασκευής περιλαμβανομένων των ειδικών ισποφόρων.

Τμήμα Β-ΙV

Οδηγίες όσον αφορά την κοινοποίηση πληροφοριών

- 1 Στην παράγραφο (1)(b) του άρθρου ΙV, α λέξεις "όπου απαιτείται" έχουν σκοπό να περιλαμβάνουν :
  - .1 την αναγνώριση πιστοπαιητικού που εκδόθηκε από άλλο Μέρος, ή
  - .2 την έκδοση του πιστοπαιητικού της Αρχής, όπου αυτό εφαρμόζεται, με βάση την αναγνώριση πιστοπαιητικού που εκδόθηκε από άλλο Μέρος.

Τμήμα Β-V

Οδηγίες όσον αφορά άλλες σύνθήκες και ερμηνεία

Η λέξη "ρυθμίσεις" στην παράγραφο (1) του άρθρου V έχει ως σκοπό να περιλαμβάνει διατάξεις που έχουν προηγούμενα θεσπισθεί μεταξύ Κρατών για την αμοιβαία αναγνώριση των πιστοπαιητικών.

Τμήμα Β-VI

Οδηγίες που αφορούν τα πιστοποιητικά

Βλέπε τις οδηγίες που δίνονται στα μέρη Β – Ι/2 και Β- ΙΙ.

Η δήλωση πολιτικής και η περιγραφή των διαδικασιών που πρέπει να ακολουθούνται θα πρέπει να δημοσεύονται προς πληροφόρηση των εταιριών που διαχειρίζονται πλοία που φέρουν την σημαία της Αρχής.

Τμήμα Β-VII

Οδηγίες που αφορούν τις μεταβατικές διατάξεις

Πιστοποιητικά που εκδίνονται για υπηρεσία για μιά χωρητικότητα που τώρα αναγνωρίζεται από ένα Τμήμα ως επαρκές προσόν για υπηρεσία σε άλλη χωρητικότητα, π.χ. πιστοποιητικά υποπλαίρχου που αναγνωρίζονται για υπηρεσία πλοιάρχου, θα συνεχίζουν να γίνονται αποδεκτά οτι τοχύουν για τέταια υπηρεσία σύμφωνα με το άρθρο VII. Η αποδοχή αυτή ισχύει επίσης σε τέταια πιστοποιητικά που εκδίνονται σύμφωνα με τις διατάξεις της παραγράφου 2 του αρθρου VII.

#### Τμήμα Β-VIII

Οδηγίες όσον αφορά τις εξαιρέσεις

Δήλωση της πολιτικής και περιγραφή των διαδικασιών που ακολουθούνται πρέπει να δημοσιεύονται για την ενημέρωση των εταιριών που διαχειρίζονται πλοία που φέρουν τη σημαία της Αρχής. Πρέπει να δίνονται οδηγίες σε εκείνους τους αξιωματούχους που είναι εξουσιοδοτημέναι από την Αρχή να εκδίδουν εξαιρέσεις. Πληροφορίες για τις ενέργειες που λαμβάνονται πρέπει να παρατίθενται περιληπτικά στην αρχική αναφορά που ανακανώνεται στον Γενικό Γραμματέα σύμφωνα με τις απαιτήσεις του μέρους Α - Ι/7.

#### Τμήμα Β-ΙΧ

Οδηγίες όσον αφορά τα ισοδύναμα

Ναυτικά πιστοποιητικά μπορεί να συνεχίζουν να γίνονται αποδεκτά και πιστοποιητικά υπηρεσίας μπορεί να συνεχίζουν να εκδίνονται σε αφωματικούς του Ναυτικού ως ισοδύναμα σύμφωνα με το άρθρο ΙΧ, με την προϋπόθεση ότι πληρούνται οι απαιτήσεις της Σύμβασης.

#### Τμήμα Β-Χ

Οδηγίες όσον αφορά τον έλεγχο

(Δεν υπάρχουν διατάξεις - βλέπε τμήμα Β - Ι/4)

#### Τμήμα Β-ΧΙ

Οδηγίες όσον αφορά την προαγωγή τεχνικής συνεργασίας

- 1 Οι Κυβερνήσεις θα πρέπει να παρέχουν, ή ρυθμίζουν την παροχή, σε συνεργασία με τον ΙΜΟ, βοηθείας σε Κράτη που έχουν δυσκολίες στην ικανοποίηση των απαιτήσεων της Σύμβασης και αι οποίες ζητούν τέταιας φύσης βοήθεια.
- 2 Η σημασία επαρκούς εκπαίδευσης για πλοιάρχους και λοιπό προσωπικό που υπηρετεί σε πετρελαιοφόρα, δεξαμενόπλαια χημικών, υγραεριοφόρα και σε επιβατηγά Ro-Ro τονίζεται, και αναγνωρίζεται ότι σε ορισμένες περιπτώσεις μπορεί να υπάρχουν περιορισμένες ευκολίες για την λήψη της απαιτούμενης εμπειρίας και της παροχής εξειδικευμένων προγραμμάτων εκπαίδευσης, ιδιαίτερα στις αναπτυσσόμενες χώρες.

#### Βάσας δεδομένων εξετάσεων

3 Συμβαλλόμενα Μέρη με ναυτικές ακαδημίες ή εξεταστικά κέντρα που εξυπηρετούν έναν αριθμ<u>ό χω</u>ρών που επιθυμούν να δημιουργήσουν βάση δεδομένων ερωτήσεων και απαντήσεων εξετάσεων ενθαρύνονται να ενεργήσουν κατ' αυτό τον τρόπο, με βάση διμερή συνεργασία με χώρα ή χώρες που ήδη διαθέτουν τέτα α βάση δεδομένων.

#### Δι αθεσι μότητα των προσομα ωτών ναυτικής εκπαίδευσης

- 4 Η Γραμματεία του ΙΜΟ διαθέτε κατάλογο εξομαωτών ναυτικής εκπαίδευσης ως πηγή πληροφορίων για τα Συμβαλλόμενα Μέρη και άλλους όσον αφορά την διαθεσιμότητα διαφορετικών τύπων προσομοιωτών για την εκπαίδευση ναυτικών, ιδιαίτερα όπου εγκαταστάσεις εκπαίδευσης αυτού του είδους μπορεί να μην είναι διαθέσιμες στην χώρα τους.
- 5 Τα Συμβαλλόμενα Μέρη παροτρύνοντα\* να παρέχουν πληροφορίες όσον αφορά τους εθνικούς τους προσομαωτές ναυπκής εκπαίδευσης στην Γραμματεία του ΙΜΟ και να ανανεώνουν τις πληροφορίες οποτεδήποτε γίνεται κάπαια αλλαγή ή προσθήκη στις δικές τους εγκαταστάσεις προσομαωτή ναυτικής εκπαίδευσης.

#### Πληροφορίες για την τεχνική συνεργασία

6 Πληροφορίες για τεχνικές συμβουλευτικές υπηρεσίες, ττρόσβαση σε διεθνή ινστιτούτα εκπαίδευσης συνδεδεμένα με τον ΙΜΟ, και πληροφορίες για υποτροφίες και άλλης μορφής τεχνική συνεργασία που μπορεί να

Βλέπε MSC.1/ Circ.1209 αναφορικά με προσομαιωτές διαθέσιμους για νουτική εκπαίδευση.

παρέχεται από τον ή μέσω του ΙΜΟ, μπορεί να ληφθούν μετά από επαφή με τον Γενικό Γραμματέα στο 4 Albert Embankment, London SE1 7SR, United Kingdom.

(Δεν δίνονται οδηγίες όσον αφορά τα άρθρα ΧΙΙ έως ΧVII.)

#### ΟΔΗΓΙΕΣ ΠΟΥ ΑΦΟΡΟΥΝ ΔΙΑΤΑΞΕΙΣ ΤΟΥ ΠΑΡΑΡΤΗΜΑΤΟΣ ΤΗΣ ΣΥΜΒΑΣΗΣ STCW

#### ΚΕΦΑΛΑΙΟ Ι

#### Οδηγίες που αφορούν τις γενικές διατάξεις

#### Τμήμα Β-Ι/1

Οδηγίες που αφορούν ορισμούς και διευκρινήσεις

- 1 Οι ορισμοί που περιέχονται στο άρθρο ΙΙ της Σύμβασης και οι ορισμοί και ερμηνείες που περιέχονται στον κανονισμό Ι/1 αυτού του Παραρτήματος ισχύουν εξίσου με τους όρους που χρησιμοποιούνται στα μέρη Α και Β αυτού του Κώδικα. Συμπληρωματικοί ορισμοί που ισχύουν μόνο στις διατάξας αυτού του Κώδικα περιέχονται στο Τμήμα Α Ι/1.
- 2 Αξιωματικοί με ιδιότητες που καλύπτονται από τις διατάξεις του κεφαλαίου VII μπορεί να ορισθούν «ως αξωματικός πολλαπλής ειδικότητας», «διπλής ειδικότητας», ή με άλλους ορισμούς όπως έχουν εγκριθεί από την Αρχή σύμφωνα με την ορολογία που χρησιμοπαείται στις απαιτήσεις που πρέπει να εφαρμοσθούν όσον αφορά την ασφαλή επάνδρωση.
- 3 Μέλη πληρώματος που έχουν τα προσόντα να υπηρετήσουν υπό τις ιδιότητες που καλύπτονται από τις διατάξεις του κεφαλαίου VII μπορεί να καθαρισθούν «ως πληρώματα πολλαπλής ειδικότητας», « διπλής ειδικότητας» ή με διαφορετικούς ορισμούς που έχουν εγκριθεί από την Αρχή σύμφωνα με την ορολογία που χρησιμοποιείται στις απατήσεις που πρέπει να εφαρμοσθούν όσον αφορά την ασφαλή επάνδρωση.

#### Τμήμα Β-1/2

Οδηγίες που αφορούν πιστοποιητικά και θεωρήσεις

- 1 Όπου η θεώρηση αποτελεί αναπόσπαστο τμήμα στην διάταξη ενός πιστοποιητικού όπως προβλέπεται στο τμήμα A I/2, παράγραφος 1, οι σχετικές πληροφορίες πρέπει να καταχωρούνται στο πιστοποιητικό με τον τρόπο που επεξηγείται πιο κάτω, με εξαίρεση την παράληψη του χώρου με αριθμό .2. Διαφορετικά κατά την προετοιμασία θεωρήσεων, που πιστοποιούν την έκδοση πιστοποιητικού, οι χώροι που φέρουν αριθμούς .1 ώς .17 στον τύπο που ακολουθεί το παρακάτω κείμενο, πρέπει να συμπληρώνεται ως εξής:
  - .1 Γράψτε το όνομα της Χώρας που το εκδίδει.
  - .2 Γράψτε τον αριθμό που έχει καθορισθεί από την Αρχή για το πιστοποιητικό.
  - .3 Γράψτε το πλήρες όνομα του ναυτικού για τον οποίο έχαι εκδοθεί το πιστοπαιητικό. Το όνομα πρέπαι να είναι το ίδιο με αυτό που εμφανίζεται στο διαβατήριο του ναυτικού, στην ταυτότητά του και σε άλλα επίσημα αποδεικτικά στοιχεία που εκδίνονται από την Αρχή.
  - .4 Ο αριθμός ή οι αριθμοί του κανονισμού ή κανονισμών της Σύμβασης STCW σύμφωνα με τους οποίους ο ναυτικός ευρέθη ότι διαθέτει τα προσόντα πρέπει να καταγραφούν εδώ π.χ.
    - .4.1 «Κανονισμός ΙΙ/1», εάν ο ναυτικός έχει ευρεθεί ότι διαθέτει τα προσόντα να απασχοληθεί με την εδιότητα αξιωματικού υπεύθυνου φυλακής ναυσιπλοΐας,
    - .4.2 «Κανονισμός III/1», εάν ο ναυτικός έχει ευρεθεί ότι διαθέτει τα προσόντα να απασχολείται σαν αξιωματικός υπεύθυνος φυλακής μηχανής σε επανδρωμένο μηχανοστάσιο, ή ως καθορσφένος υπεύθυνος αξιωματικός μηχανής σε περιοδικά μη επανδρωμένο μηχανοστάσιο,
    - .4.3 «Κανονισμός VI/2» εάν ο ναυτικός έχει τα προσόντα να απασχολείται με την ιδιότητα του χειριστού ραδιοεπικανωνιών,
    - .4.4 «Κανονισμός VII/1» εάν το πιστοποιητικό είναι πιστοποιητικό λειτουργιών και ο ναυτικός έχει ευρεθεί ότι διαθέτει τα προσόντα για να εκτελεί λειτουργίες που καθορίζονται στο τμήμα Α του Κώδικα, για παράδειγμα, την λειτουργία μηχανικού σε διακητικό επίπεδο. Και
    - .4.5 «Κανονισμοί ΙΙΙ/1 και V/1», εάν έχει ευρεθεί ότι διαθέτει τα προσόντα για να απασχολείται με την ιδιότητα αξιωματικού μηχανής υπεύθυνου φυλακής σε επανδρωμένο μηχανοστάσιο, ή ως καθορισμένος αξιωματικός υπεύθυνος μηχανής σε περιοδικά μη επανδρωμένο μηχανοστάσιο σε πετρελαιοφόρα. (Βλέπε περιορισμούς στις παραγράφους .8 και .10 παρακάτω)

- .5 Γράψτε την ημερομηνία λήξης της θεώρησης. Αυτή η ημερομηνία δεν θα είναι μεταγενέστερη της ημερομηνίας λήξης, εάν υπάρχει, του πιστοποιητικού για το οποίο έχει εκδοθεί η θεώρηση, ούτε να είναι μεταγενέστερη των πέντε ετών ύστερα από την ημερομηνία έκδοσης της θεώρησης
- .6 Σε αυτή την στήλη θε πρέπει να εισάγεται κάθε μία από τις λειτουργίες που προσδιορίζονται στο Τμήμα Α του Κώδικα, τις οποίες ο ναυτικός είναι ικανός να εκτελεί. Λειτουργίες και τα αντίστοιχα επίπεδα ευθύνης προσδιορίζονται στους πίνακες προτύπων ικανότητας των κεφαλαίων ΙΙ, ΙΙΙ και ΙV του Μέρους Α του Κώδικα, και αναφέρονται για ευκολία στην εισαγωγή του Μέρους Α. Οταν γίνεται αναφορά σύμφωνα με το .4 παραπάνω στους κανονισμούς των κεφαλαίων ΙΙ, ΙΙΙ ή ΙV δέν είναι απαραίτητη η αναφορά συγκεκριμένων λειτουργιών.
- .7 Σε αυτή την στήλη θα πρέπει να εισάγονται τα επίπεδα ευθύνης στα οποία ο ναυτικός είναι ικανός να εκτελεί τις λειτουργίες της στήλης .6. Αυτά τα επίπεδα ευθύνης προσδιορίζονται στους πίνακες προτύπων ικανότητας των κεφαλαίων ΙΙ, ΙΙΙ και ΙV του Κώδικα, και παρατίθενται επίσης για ευκολία στην εισαγωγή του Μερους Α.
- .8 Γενικοί περιορισμοί, όπως τιχ να φορά διορθωτικούς φακούς όταν εκτελεί τα καθηκοντά του, θα εσάγονται στην κορυφή της στήλης περιορισμών. Περιορισμοί που ισχύουν για τις λειτουργίες που παρατίθενται στην στήλη .6 θα πρέπει να εισάγονται στην αντίσταιχη γραμμή της αναφερομένης λειτουργίας, π.χ.
  - 8.1 "Δέν ισχύει για υπηρεσία σε δεξαμενόπλοια" εάν δέν είναι πιστοποιημένος σύμφωνα με το κεφάλαιο V,
  - 8.2 "Δέν ισχύει για υπηρεσία για δεξαμενόπλοια άλλα πλήν πετρελαιοφόρων"- εάν είναι πιστοποιημένος σύμφωνα με το κεφάλαιο V μόνον για πετρελαιοφόρα,
  - 8.3 "Δέν ισχύει για πλοία στα οποία λέβητες ατμού αποτελούν τμήμα της κύριας μηχανικής εγκατάστασης του πλοίου" -εάν η σχετική γνώση έχει παραληφθεί σύμφωνα με τις προβλέψεις του Κώδικα STCW, και
  - 8.4 "Ισχύει μόνον για παράκπους πλόες" εάν η σχεπκή γνώση έχει απαλειφθεί σύμφωνα με τις διατάξεις του Κώδικα STCW.
  - Σημείωση: Περιορισμοί χωρητικότητας και ισχύος δεν είναι απαραίτητο να παρατίθεται εδώ εάν παρατίθεται στον τίτλο του πιστοπαιητικού και στην ιδιότητα που εισάγεται στην στήλη .9.
- .9 Ηιδιότητα ή ιδιότητες της στήλης 9 θα πρέπει να είναι εκείνες που προβλέπονται στον πτλο του κανονισμού ή των κανονισμών της STCW που αναφέρονται στο πιστοποιητικό που εκδόθηκε σύμφωνα με το κεφάλαιο ΙΙ ή ΙΙΙ, ή θα πρέπει να προσδιορίζεται στις ισχύουσες απαιτήσεις περί ασφαλούς επάνδρωσης της Αρχής, αντίσταχα.
- .10 Γενικοί περιορισμοί, επίσης, όπως απαίτηση να φορά διορθωτικούς φακούς όταν εκτελεί τα καθήκοντά του θα πρέπει να εισάγονται στην κορυφή αυτής της στήλης περιορισμών. Οι περιορισμοί που εισάγονται στην στήλη .10 θα πρέπει να είναι ίδια με αυτούς της στήλης .8 για τις λειτουργίες που εκτελούνται σε κάθε καταχωρημένη ιδιότητα.
- .11 Ο αριθμός που ασάγεται σε αυτό το διάστημα θα είναι εκείνος του πιστοποιητικού, έτσι ώστε τόσο το πιστοποιητικό όσο και η θεώρηση να έχουν την ίδια μοναδική αρίθμηση για αναφορά και για εντοπισμό στον κατάλογο πιστοποιητικών ή/και θεωρήσεων κ.τ.λ.
- .12 Εδώ θα εισάγεται η αρχική ημερομηνία έκδοσης της θεώρησης. Μπορεί να είναι ή ίδια ή να διαφέρει από την ημερομηνία έκδοσης του πιστοποιητικού, ανάλογα με την περίπτωση.
- .13 Το όνομα του αβωματούχου που έχει εξουσιοδοτηθεί να εκδίδει την θεώρηση θα πρέπει να εισάγεται εδώ με κεφαλαία γράμματα, κάτω από την υπογραφή του.
- .14 Η ημερομηνία γέννησης θα πρέπει να έχει επιβεβαιωθεί από τα τηρούμενα από την Αρχή στοιχεία ή να έχει επιβεβαιωθεί με άλλον τρόπο.

- .15 Η θεώρηση θα πρέπει να υπογράφεται από τον ναυτικό με την παρουσία αξιωματούχου, ή μπορεί να συμπεριληφθεί από την αίτηση του ναυτικού, πλήρως συμπληρωμένη και επιβεβαιωμένη.
- .16 Η φωτογραφία θα είναι τυπική ασπρόμαυρη ή έγχρωμη, τύπου διαβατηρίου κεφαλής και ώμων, που θα παραδίνεται εις διπλούν από τον ναυτικό, ώστε το ένα αντίγραφο να κρατείται μαζί με τα σχετικά αποδεικτικά σταιχεία του αρχείου πιστοποιητικών.
- .17 Εάν τα τμήματα επαναθεώρησης αποτελούν τμήμα της θεώρησης (δές τμήμα Α-Ι/2 παράγραφο 1), η Αρχή μπορεί να επαναθεωρεί την θεώρηση συμπληρώνοντας το τμήμα αφού ο ναυτικός έχει αποδείξει συνεχή επαγγελματική ικανότητα όπως απατείται από τον κανονισμό Ι/11.

Φωτογραφία κατόχου του πιστοποιητικού

		(ΧΩΡΑ)	
	ΡΙ ΠΡΟΤΥΠΩΝ Ε	ΕΚΠΑΙΔΕΎΣΗΣ, ΠΙΣΤΟΠΟΙΗ	ΝΑ ΜΕ ΤΙΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΔΙ- ΣΗΣ ΚΑΙ ΤΗΡΗΣΗΣ ΦΥΛΑΚΗΣ
σμού4της ανωτέρω λ τουργίες, στα επίπεδα που ι	.ο οποίος ευρέθα Σύμβασης όπως τ καθορίζοντα ,υπο ιερομηνία λήξης τι	να διαθέτει τα προσόντα σύμ ροποπαιήθηκε, και ευρέθη ικι ικείμενος στους όπαιους περι	ριθ2έχει εκδοθεί στον φωνα με τις διατάξεις του κανονι- ανός να εκτελεί τις παρακάτω λει- ορισμούς που παρατίθενται μέχρι τύος αυτής της θεώρησης που εν-
.6 ΛΕΙΤΟΥΡΓΙΑ	.7 ΕΠΙΠΕΔΟ	.8 ΠΕΡΙΟΡΙΣΜΟΙ	ΠΟΥ ΕΦΑΡΜΟΖΟΝΤΑΙ
		(EAN	YNAPXOYN)
•			
Ο νόμιμος κάτοχος αυτού το καθορίζεται στις απαιτήσεις (			ταρακάτω ιδιότητα ή ιδιότητες που
,9 ΕΙΔΙΚΟΤΗΊ	ГА	.10 ΠΕΡΙΟΡΙΣΜΟΙ ΠΟΥ ΕΦΑ	PMOZONTAI(EAN YNAPXOYN)
	<u></u>		-
Θεώρηση υπ.αριθμ	.11.,	εκδόθηκε την	12
(Επίσημη σφραγίδα)		 Υπογραφή	εξουσιοδοτημένου αξιωματούχου
		Όνομα εξο	13 υσιοδοτημένου αξιωματουχου
Το πρωτότυπο αυτής της θε 11 της Σύμβασης ενώ υπηρε	:ώρησης πρέπει ν ετεί στο πλοίο.	να είναι φιαθέαι μο αήμφωνα Έ	ιε τον κανονισμό 1/2, παράγραφος
Ημερομηνία γέννησης του κ	τοτοπ υοτ υοχότα	τα ηπκού	.14
Υπογραφή κατόχου του πιστοποιητικού			

.16

Η ισχύς αυτής της θεώρησης επεκτείνεται έως		
(Επίσημη σφραγίδα)	Υπογραφή εξουσιοδοτημένου αξιωματούχου	
Ημερομηνία Θεώρησης17	Όνομα εξουσιοδοτημένου αξιωματούχου	
Η ισχύς αυτής της θεώρησης επεκτείνεται έως	, ,	
(Επίσημη σφραγίδα)	Υπογραφή εξουσιοδοτημένου αξιωματούχου	
Ημερομηνία Θεώρησης17		
	Όνομα εξουσιοδοτημένου αξιωματούχου °	

- 2 Θεώρηση που επικυρώνει την αναγνώριση πιστοποιητικού είναι δυνατόν να επισυνάπτετα και να απιστελεί τμήμα του θεωρουμένου πιστοποιητικού, ή μπορεί να εκδοθεί ξεχωριστό έγγραφο (δές Κανονισμό Ι/2 της STCW, παράγραφο 8). Ολες οι εγγραφές στο έγγραφο πρέπει να γίνονται με Λαπνικούς χαρακτήρες και Αραβικούς αριθμούς (δές Κανονισμό Ι/2 της STCW, παράγραφο 10). Τα διαστήματα με αριθμηση .1 έως .17 στο έντυπο που ακολουθεί θα πρέπει να συμπληρώνονται όπως προσδιορίζεται στην παράγραφο 1 ανωτέρω, εκτός των παρακάτω διαστημάτων:
  - .2 θα πρέπει να εισάγεται ο αριθμός έκδοσης από την Αρχή που εξέδωσε το πιστοπιατικό προς αναγνώριση.
  - .3 το όνομα θα πρέπει να είναι το ίδιο με αυτό που εμφανίζεται στο θεωρούμενο πιστοποιητικό,
  - .4 θα πρέπει να εισάγεται το όνομα του Κράτους Μέλους που εξέδωσε το πιστοποιητικό,
  - .9 Η ιδιότητα ή ιδιότητες που εισάγονται θα επιλέγονται, αντίσταιχα, από εκείνες που αναφέρονται στις ισχύουσες απαιτήσεις ασφαλούς επάνδρωσης της Αρχής που αναγνωρίζει το πιστοπαιητικό,
  - .11 ο αριθμός που εισάγεται θα πρέπει να είναι μοναδικός για την θεώρηση τόσο για την αναφορά σε αυτήν όσο και για λόγους εντοπισμού της στο αρχείο θεωρήσεων,και
  - .12 η ημερομηνία αρχικής έκδοσης της θεώρησης θα εισάγεται.

(2000)[10] 0 7 [10]		(ΧΩΡΑ)	
ΔΙΕΘΝΟΥΣ ΣΥΜΒΑΣΗΣ ΠΙ ΤΩΝ ΝΑΥΤΙΚΩΝ ΤΟΥ 1978	ΕΡΙ ΠΡΟΤΥΠΩΝ ΕΚΠ Β, ΟΠΩΣ ΤΡΟΠΟΠΟΙΗ	ΑΙΔΕΥΣΗΣ, ΠΙΣΤΟΠΟΙΉ ΘΗΚΕ	ΦΩΝΑ ΜΕ ΤΙΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΣΗΣ ΚΑΙ ΤΗΡΗΣΗΣ ΦΥΛΑΚΗΣ
να με τις διατάξεις του κανον	αριασμό της Κυβερνησ πσμού 1/10 της παραπό λεί τις παρακάτω λειτο έως την - 5ή έως	της της άνω Σύμβασης, όπως τρο υργίες ,στα επίπεδα που την ημερομηνία λήξης τη	υ2που εκδόθηκε στονείναι αναγνωρισμένο σύμφω- υποπαήθηκε, και ο νόμιμος κάτο- καθορίζονται, υπό τους περιορι- ις όποιας ανανέωσης της ισχύος
.6 ЛЕІТОҮРГІА	.7 ΕΠΙΠΕΔΟ		ΠΟΥ ΕΦΑΡΜΟΖΟΝΤΑΙ ΥΠΑΡΧΟΥΝ)
		Alfre	
Ο νόμιμος κάτοχος αυτής τ φωνα με πςισχύουσες απα	ης θεώρησης μπορεί ν ιτήσεις ασφαλούς επάν	α υπηρετήσει υπο την πο δρωσης που ισχύουν απο	αρακάτω ιδιότητα ή ιδιότητες σύμ- ό την Αρχή.
,9 ΕΙΔΙΚΟΤΗΤΑ		.10 ΠΕΡΙΟΡΙΣΜΟΙ (	ЕАN ҮПАРХОҮN)
Θεώρηση υπ.αριθμ	.11	εκδόθηκε την	12
(Επίσημη σφραγίδα)		Υπογραφή	εξουσιοδοτημένου αξιωματούχου
		· Όνομα εξο	13 ουσιοδοτημένου αξιωματούχου
Το πρωτότυπο αυτής της 11 της Σύμβασης ενώ υπη	θεώρησης πρέπει να ε ρετεί στο πλοίο.	ίναι διαθέσιμο σύμφωνα (	με τον κανονισμό 1/2, παράγραφος
Ημερομηνία γέννησης του		אורן κού ,	.14
Υπογραφή κατόχου του π			.15
Φωτογραφία κατόχου του	πιστοποιηπκού		

.16

Ητσχύς αυτής της θεώρησης επεκτείνεται έως	•
(Επίσημη σφραγίδα)	
	Υπογραφή εξουσιοδοτημένου αξιωματούχου
Ημερομηνία Θεώρησης17	Ονομα εξουσιοδοτημένου αξιωματούχου
Η εσχύς αυτής της θεώρησης επεκτείνεται έως	
(Επίσημη σφραγίδα)	
	Υπογραφή εξουσιοδοτημένου αξιωματούχου
Ημερομηνία Θεώρησης	
	Όνομα εξουσιοδοτημένου αξιωματούχου

- 3 Κατά την αντιμετώπιση ενός πιστοποιητικού ή θεώρησης που έχει απωλεσθεί ή καταστραφεί. Τα Συμβαλλόμενα Μέρη θα εκδίδουν πιστοποιητικό προς αντικατάσταση με νέο αριθμό, προς αποφυγή σύγχισης με το έγγραφο προς αντικατάσταση.
- 4 Όταν γίνεται αίτημα επανεκτίμησης μέσα στα πλαίσια έξι μηνών πριν από την λήξη μιας θεώρησης, η θεώρηση που αναφέρεται στις παραγράφους 5, 6 και 7 του κανονισμού Ι/2, μπορεί να επικυρωθεί εκ νέου έως:
  - .1 το πέμπτο έτος επικύρωσης ή επέκτασης επικύρωσης, θεώρησης, ή
  - .2 η ημερομηνία ισχύος του θεωρημένου πιστοποιητικού, όποιο είναι πιο σύντομο.
- 5 Όπου εκδίδεται Πιστοπαιητικό Επάρκειας, θα περιλαμβάνει τις ακόλουθες πληροφορίες:
  - .1 ονόματα Μέρους και αρχής που εκδίδει,
  - .2 αριθμός πιστοποιητικού από την εκδούσα αρχή,
  - .3 πλήρες όνομα και ημερομηνία γέννησης του ναυτικού για τον οποίο εκδίδεται το πιστοποιητικό. Το όνομα και η ημερομηνία γέννησης πρέπει να είναι ίδια με αυτήν που παρατίθεται στο διαβατήριο του ναυτικού ή σε όποιοδήποτε αποδεικτικό στοιχείο ταυτότητας του ναυτικού,
  - .4 τίτλος πιστοποιήτικού. Για παράδειγμα, εάν το πιστοποιήτικό εκδίδεται σε σχέση με τον κανονισμό VI/3, παράγραφος 2, ο τίτλος που χρησιμοποιείται θα είναι « προχωρημένη πυρόσβεση» και εάν εκδίδεται σε σχέση με τον κανονισμό VI/5, παράγραφος 1, ο τίτλος που χρησιμοποιείται θα είναι «αξιωματικός ασφάλειας πλοίου»,
  - .5 αριθμός, ή αριθμοί, των κανονισμών της Σύμβασης ή του τμήματος του Κώδικα της STCW, σύμφωνα με τον οποίο ο ναυτικός ευρέθηκε προσοντούχος,
  - .6 ημερομηνίες έκδοσης και λήξης πιστοποιητικού. Εάν η εγκυρότητα αυτού του πιστοποιητικού είναι απεριόριστη, τότε, προς όφελος των διευκρινίσεων, ο όρος «απεριόριστος» θα τίθεται μπροστά από την ημερομηνία λήξης,

- .7 εάν εφαρμόζεται, περιορισμοί, είτε γενικός περιορισμός (όπως η απαίτηση να φορούν διορθωπκούς φακούς), περιορισμός τύπου πλοίου (όπως «έγκυρο μόνο για υπηρεσία σε πλοίο χωρηπκότητας μκρότερης των 500 τόνων») ή, περιορισμός πλού ( όπως «μόνο για παράκπους πλόες»),
- .8 όνομα και υπογραφή εξουσιοδοτημένου ατόμου που εκδίδει το πιστοποιητικό,
- .9 φωτογραφία ναυτικού. Η φωτογραφία θα είναι η τυπική μαυρόαστηρη ή έγγραφη τύπου διαβατηρίου, φωτογραφία κεφαλής και ώμων,
- .10 εάν το πιστοποιητικό πρόκειται να επικυρωθεί εκ νέου, τότε η ημερομηνία επικύρωσης, επέκτασης εσχύος, απαιτείται όνομα και υπογραφή εξουσιοδοτημένου ατόμου, και
- .11 λεπτομέρειες επικανωνίας με την εκδούσα Αρχή.

#### Πίνακας Β –1/2

## Κατάλογος πιστοπαι ητικών ή αποδεικτικών εγγράφων που απαιτούνται από την Σύμβαση STCW

Ο κατάλογος παρακάτω αναγνωρίζει όλα τα πιστοποιητικά ή αποδεικτικά έγγρφα που περιγράφονται στην Σύμβαση που εξουσιοδοτεί τον κάτοχο να υπηρετεί σε σεγκεκριμένες ιδιότητες σε πλοία. Τα πιστοποιητικά υπόκεινται στις απαιτήσεις του κανονισμού Ι/2 σχετικά με την γλώσσα και τη διαθεσιμότητά του στην αρχική του μορφή.

Ο κατάλογος επίσης αναφέρει τους σχετικούς κανονισμούς και τις απαιτήσεις για θεώρηση, καταχώρηση και επικύρωση εκ νέου.

Κανονι σμοί	Τύπος τι στοπα ητικού και σύντομη περιγραφή	Θεώρηση που δηλώνουν ανα- γνώρ ση ενός τιι στοπα ητι κού	Απα τούμενη εγγραφή	Επικύρωση εκ νέου του τη στο- τια ητικού
11/1, 11/2, 11/3,   111/1, 111/2, 111/3,   111/6, 1V/2, V11/2	Ποτοπα ητικό Ικανότητας – Για πλα άρχους, αξωμοτούχους κα ράδιοχε ριστές GMDSS	Na	Na	Næ
- 11/4,11/4,V11/2	Πστοπαητικό Ικανότητας- Για κατώτερα πληρώματα τι στο- παημένα να συμμετέχουν στην τηρηση φυλακής ναυα πλοΐας και μηχανοστασίου.	ΌχI	Na	Όχι
11/5,111/4,V11/2	Π στοπα η κό Ικανότητας- Πα κατώτερα πληρώματα κατάλλη-λα πλοτοπα ημένα ως προσοντούχος ναυπκός καταστρώμα-τος, μηχανής ή ηλεκτροτεχνικού πληρώματος	Όχι	Na	ïXO
V/1-1,V/1-2	Ποτοπαητικό Ικανότητας ή θεώρηση Ποτοπαητικού Ικανό- τητας- Γιο πλαάρχους και αξ- ωματικούς για δεξαμενόπλα α, χημικά υγραεριοφόρα	Na	Ncı	N:ca
V/1-1,V/1-2	Π στοτια ητικά ικανότητας- Πα κατώτερα πληρώματα σε δεξα- μενόπλα α, χημικά ή υγραεριο- φόρα	Од	Na	Όχι
V/2	Αποδεκτικά έγγραφα- Εκπαί- δευση για πλαιάρχους, αξιωμα- τικούς και άλλο προσωπικό που υπηρετούν σε επιβατηγά πλοία	Όχι	Na	ίχσ
VI/1	Π στοπα ηπικό Ικανότητας – Βασική Εκπαίδευση	Уу	Na	Na
VI/2	Π στοπα ηπκό Ικανότητας – Σωσπκών μέσων και ταχύπλο- ων	ŊÜ	Na	Na
VI/3	Πατοπαιητικό Ικανότητας – Προχωρημένα Πυροσβεστικά	- KG	Nai .	Na
VI/4	Ποτοπαητικό Ικανότητας – Ιατρικών μέσων Πρώτων Βοη- θειών	ίχα	Na	ıχo
VI/5	Πστοπαιτικό Ικανότητας – Αξιωματικός Ασφάλειας Πλοίου	אָס	Na	ΌχI
VI/6	Ποτοπαητικό Ικανότητας- Εκπαίδευση γνώσης ασφάλειας ή εκπαίδευση ασφάλειας για ναυτικούς με ορισμένα καθήκο- ντα ασφάλειας	Ŋ	Na	Όχι

#### Σημε ώσες:

- 1 Θεώρηση που δηλώνει αναγνώριση ενός πιστοποιητικού σημαίνει θεώρηση σύμφωνα με τον κανονισμό Ι/2, παράγραφος 7.
- 2 Νηολόγηση απαιτούμενη σημαίνει ως μέρος νηολογίου ή νηολογίων σύμφωνα με τον κανονισμό ί/2, παράγραφος 14.
- 3 Επικύρωση εκ νέου πιστοποιητικού σημαίνει θέσπιση συνεχής επαγγελματικής ικανότητας σύμφωνα με τον κανονισμό Ι/ΙΙ ή τήρηση των απαιτούμενων προτύπων ικανότητας σύμφωνα με τα τμήματα Α-VI/1 έως Α-VI/3, όπως εφαρμόζεται.
- 4 Όπως απαιτείται από τον κανονισμό V/2, παράγραφος 3 ναυτικοί που έχουν ολοκληρώσει εκπαίδευση στη «διαχείριση πλήθους», διαχείριση κρίσης και ανθρώπινη συμπεριφοράς» ή ασφάλεια επιβατών, ασφάλεια φορτίου και ακεραιότητα κύτους» σε διαστήματα δεν θα υπερβαίνει τα πέντε έτη, αναλαμβάνει κατάλληλη επιμορφωτική εκπαίδευση ή να παρέχει αποδεικτικά στοιχεία ότι έχουν επιτύχει τα απαιτούμενα πρότυπα ικανότητας μέσα στα πλαίσια των πέντε ετών.
- 5 Τα πιστοπαιητικά εκανότητας που εκδόθηκαν σύμφωνα με τους κανονισμούς Ι/1,Ι/2,Ι/3,ΙΙ/1.ΙΙ/2,ΙΙ/3,ΙΙ/3,ΙΙ/6 και VII/2 περιλαμβάνουν απαιτήσεις εκανότητας στη «βασική εκανότητα», σωστικά μέσα εκτός από τα ταχύπλοα σωστικά», «προχωρημένα πυροσβεστικά μέσα» και «πρώτες βοήθειες» κατά συνέπεια, α κάτοχα των προαναφερόμενων πιστοπαιητικών εκανότητας δεν απαιτούνται να έχουν Πιστοπαιητικά εκανότητας όσον αφορά εκείνες τις ιδιότητες του κεφαλαίου VI.
- 6 Σύμφωνα με τα τμήματα Α-VI/1, Α-VI/2 και Α-VI/3, α ναυτικοί θα παρέχουν αποδεικτικά σταχεία ότι έχουν τηρήσει τα απαιτούμενα πρότυπα ικανότητας κάθε πέντε έτη.
- 7 Όπου εκπαίδευση γνώσης ασφάλειας ή εκπαίδευση για καθορισμένα καθήκοντα ασφάλειας δεν περιλαμβάνεται στα προσόντα για το υπό έκδοση πιστοποιητικό.

#### Τμήμα Β - 1/3

Οδηγίες όσον αφορά παράκτιους πλόες

Τα Παράκτια Κράτη μπορούν να υιοθετήσουν «όρια παράκτιων πλόων» μέσω διμερών ή πολυμερών ρυθμίσεων. Λεπτομέρειες τέτσων ρυθμίσεων θα αναφέρονται στον Γενικό Γραμματέα, ο οποίος θα κανοπαήσει αυτά τα στοιχεία σε όλα τα Συμβαλλόμενα Μέρη.

#### Τμήμα Β - 1/4

Οδηγίες όσον αφορά τις διαδικασίες ελέγχου\*

#### Ει σαγωγή

- 1 Ο σκοπός των διαδικασιών ελέγχου του κανονισμού Ι/4 είναι να δοθεί ή δυνατότητα στους κατάλληλα εξουσιοδοτημένους αξιωματικούς από τα Κράτη Λιμένες να βεβαιωθούν ότι οι επιβαίνοντες ναυτικοί έχουν τις απαραίτητες ικανότητες για να εξασφαλίσουν την ασφαλή και χωρίς πρόκληση ρύπανσης λειτουργία του πλοίου.
- 2 Κατ' ουσίαν αυτή η διάταξη δεν είναι διαφορετική από την ανάγκη πραγματοποίησης ελέγχου στην κατασκευή και στον εξοπλισμό των πλοίων. Στην πραγματικότητα, στηρίζεται σε αυτές τις επιθεωρήσεις για να πραγματοποιήσει αξιολόγηση του όλου συστήματος της επί του πλοίου ασφάλειας και την πρόληψη ρύπανσης.

#### Αξιολόγηση

- 3 Περιορίζοντας την αξιολόγηση όπως αναφέρεται στο τμήμα A-I/4, η υποκειμενικότητά που είναι αναπόφευκτο σταιχείο σε όλες τις διαδικασίες ελέγχου, μειώνεται στο ελάχιστο και όχι περισσότερο απ' ότι θα ήταν προφανής σε άλλους τύπους ελέγχου.
- 4 Οι σαφείς ενδείξεις που μνημονεύονται στον κανονισμό Ι/4, παράγραφος 1-3, θα είναι συνήθως επαρκείς για να επιστήσουν την προσοχή του επιθεωρητού σε ειδικούς τομείς ικανότητας, που θα ανιχνεύονται αναζητώντας αποδεικτικά στοιχεία εκπαίδευσης στις υπό εξέταση δεβότητες. Αν αυτά τα αποδεικτικά στοιχεία είναι ανεπαρκή ή δεν πείθουν, ο εξουσιοδοτημένος αξιωματικός μπορεί να ζητήσει να παρακολουθήσει επίδειξη της σχετικής δεξιότητας.
- 5 Θα είναι θέμα επαγγελματικής κρίσης του επιθεωρητή που βρίσκεται στο πλοίο, είτε μετά από ένα περιστατικό" όπως παρατίθεται στον κανονισμό Ι/4 ή για τους σκοπούς επιθεώρησης ρουτίνας, το κατά πόσο το πλοίο λειτουργεί κατά τρόπο που ενδεχόμενα θα προξενήσει κίνδυνο σε άτομα, την περιουσία και στο περιβάλλον.

#### Τμήμα Β - 1/5

Οδηγίες όσον αφορά Εθνικές διατάξεις

(δεν υπάρχουν διατάξεις)

Οι σχετικές πρότυπες συρές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταιμασία των εκπαιδεύσεων

<sup>\*</sup> Βλέπε τον Κώδικα των Δεθνών Προτύπων και Προτενόμενων Πρακτικών για τη Διερεύνηση θεμάτων Ασφαλείας ναυτικού ατυχήματος ή ναυτικού περιστατικού (Κώδικας Διερεύνησης Άτυχήματος)

#### Τμήμα Β -1/6

Οδηγίες όσον αφορά εκπαίδευση και αξιολόγηση

#### Προσόντα εκπα δευτών και αξιολογητών

1 Κάθε Μέρος θα πρέπει να εξασφαλίσει ότι α εκπαίδευτές και α αξιολογητές διαθέτουν τα κατάλληλα προσόντα και εμπειρία για τους συγκεκριμένους τύπους και επίπεδα εκπαίδευσης ή αξιολόγησης ικανότητας ναυτικών, όπως απαιτείται από τη Σύμβαση σύμφωνα με τις οδηγίες αυτού του τμήματος.

#### Εκπαίδευση και αξιολόγηση κατά την διάρκεια της υπηρεσίας

- 2 Κάθε άτομο στο πλοίο και στην ξηρά,που είναι υπεύθυνο για την διεξαγωγή της κατά την υπηρεσία εκπαίδευσης ναυτικού, που πρόκεται να χρησιμοποιηθεί σαν προσόν για πιστοποίηση σύμφωνα με τη Σύμβαση, θα πρέπει να έχει λάβει κατάλληλη εκπαίδευση σε εκπαιδευτικές τεχνικές\*.
- 3 Κάθε άτομο, υπεύθυνο για την επίβλεψη της κατά την υπηρεσία εκπαίδευσης ναυτικού, που πρόκεται να χρησιμοποιηθεί σαν προσόν για πιστοποίηση σύμφωνα με την Σύμβαση, θα πρέπει να διαθέτει τις κατάλληλες γνώσεις Τεχνικών Εκπαίδευσης και μεθόδων εκπαίδευσης και άσκησης.
- 4 Κάθε άτομο, στο πλοίο ή την ξηρά, που πραγματοπαεί κατά την υπηρεσία αξιολόγηση ικανότητας του ναυτικού, που πρόκειται να χρησιμοποιηθεί ως προσόν για πιστοποίηση σύμφωνα με τη Σύμβαση, θα πρέπει να:
  - .1 έχει λάβει κατάλληλες οδηγίες όσον αφορά τις μεθόδους και πρακτική αξιολόγησης\*, και
  - .2 να έχει αποκτήσει πρακτική εμπειρία αξιολόγησης υπό επιτήρηση και σε βαθμό που να ικανοπαεί έμπειρο αξιολογητή.
- 5 Κάθε άτομο υπεύθυνο για την επιτήρηση της, κατά την υπηρεσία, αξιολόγησης ικανότητας ναυτικού, που πρόκειται να χρησιμοποιηθεί ως προσόν για πιστοποίηση σύμφωνα με την Σύμβαση, πρέπει να κατανοεί πλήρως το σύστημα αξιολόγησης και τις μεθόδους και πρακτικές αξιολόγησης.\*.

#### Χρήση εκπαίδευσης από απόσταση και ηλεκτρονικής εκπαίδευσης

6 Τα Συμβαλλόμενα Μέρη μπορεί να επιτρέπουν την εκπαίδευση ναυτικών από απόσταση και ηλεκτρονική μάθηση σύμφωνα με τα πρότυπα εκπαίδευσης και αξιολόγησης που παρατίθενται Α-Ι/6 και τις οδηγίες που δίνονται παρακάτω.

#### Οδηγίες για εκπαίδευση από απόσταση και ηλεκτρονική εκπαίδευση

7 Κάθε Μέρος θα εξασφαλίζει ότι κάθε πρόγραμμα εξ' αποστάσεως και ηλεκτρονικής εκιταίδευσης:

- τι παρέχεται από έναν οργανισμό που είναι εγκεκριμένος από το Μέρος,
- .2 είναι κατάλληλο για τους επιλεγμένους σκοπούς και τα καθήκοντα εκπαίδευσης να πληροί το επίπεδο ικανότητας για το θέμα που καλύπτα,
- .3 έχει σαφείς οδηγίες για τους εκπαιδευόμενους για να κατανοήσουν πως λειτουργεί το πρόγραμμα,
- .4 παρέχει αποτελέσματα εκπαίδευσης που πληρούν όλες τις απατήσεις για να παρέχουν θεμελιώδη γνώση και ικανότητα του θέματος.
- .5 είναι δομημένο κατά τρόπο που καθιστάτκανό τον εκπαιδευόμενο να παρουσιάζει συστηματικά ότι έχει μάθει και με αυτοαξιολογήσεις και εφργασίες του καθηγητή, και
- .6 παρέχει επαγγελματική. βοήθεια καθηγητή μέσω επικοινωνίας από το τηλέφωνο, με φαξ ή. e-mail.
- 8 Οι Εταιρίες θα πρέπει να αξασφαλίζουν ότι παρέχεται ασφαλές περιβάλλον εκμάθησης και ότι παρέχεται επαρκής χρόνος μελέτης για τον εκπαιδευόμενο.

<sup>🐧 🔾</sup> σχεπκές πρότυπες σειρές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταιμασία των εκπαιδεύσεων

9 Όπου παρέχεται ηλεκτρονική εκπαίδευση, καινές μορφές (format) πληροφοριών όπως ΧΜL (Επεκτάσιμη Γλώσσα Σημάδευσης), που είναι ένας ευέλικτος τρόπος μερισμού και της μορφής και των δεδομένων στο Παγκόσμιο Δίκτυο,διαδικτυακά και παντού, πρέπει να χρησιμοπαιούνται.

10 Το σύστημα ηλεκτρονικής εκπαίδευσης θα πρέπει να διασφαλίζεται από παράνομες παρεμβάσεις και προσπάθειες πειρατείας του συστήματος.

## Οδηγίες αξιολόγησης της προόδου του εκπαιδευόμενου και των επιτεύξεων από την εξιαποστάσεως εκπαίδευση και την ηλεκτρονική εκπαίδευση

- 11. Κάθε Μέρος θα πρέπει να εξασφαλίζει ότι εγκεκριμένες διαδικασίες αξιολόγησης προβλέπονται για κάθε πρόγραμμα εξ απόστασης εκπαίδευσης και ηλεκτρονικής εκπαίδευσης, που περιλαμβάνουν:
  - .1 σαφείς πληροφορίες στους εκπαιδευόμενους με τρόπο που τέστ και εξετάσεις διεξάγονται και πως κανοπαιούνται τα αποτελέσματα,
  - .2 τέστ με ερωτήσεις που είναι κατανοητές και θα αξιολογήσουν με επάρκεια την ικανότητα του εκπαιδευόμενου και είναι κατάλληλες στο επίπεδο που εξετάζεται,
  - .3 διαδικασίες εξασφάλισης σύχρονων θεμάτων,
  - .4 τους όρους όπου οι εξετάσεις μπορεί να λάβουν μέρος και τις διαδικασίες διεξαγωγής επίβλεψης,
  - .5 ασφαλείς διαδικασίες για το σύστημα εξετάσεων έτσι ώστε θα αποτρέπει την αντιγραφή, και
  - .6 διαδικασίες ασφαλούς επικύρωσης καταχώρησης αποτελεσμάτων προς όφελος του Μέρους.

## Καταχώρηση εγκεκα μένων εκπα δευτικών προμηθευτών, σειρών και προγραμμάτων

12 Κάθε Μέρος θα πρέπει να εξασφαλίζει ότι μητρώο ή μητρώα εγκεκριμένων εκπαιδευτικών προμηθευτών, σειρών και προγραμμάτων τηρούντα και διατίθενται στις εταιρίες και στα άλλα αιτούμενα Συμβαλλόμενα Μέρη.

#### Τμήμα Β - 1/7

Οδηγίες όσον αφορά την κοινοποίηση πληροφοριών.

### Αναφορές επί των αντιμετωτή ζομένων δυσκολιών

1 Ενθαρρύνονται τα Συμβαλλόμενα Μέρη, κατά την κοινοποίηση των πληροφοριών σύμφωνα με το άρθρο IV και τον κανονισμό I/7 της Σύμβασης,να συμπεριλάβουν ένα ευρετήριο που να εντοπίζει ιδιαίτερα τις απαιτούμενες πληροφορίες ως ακολούθως:

#### Ευρετήριο στα χείων που υποβάλλοντα σύμφωνα με το άρθρο IV και τον κανονισμό Ι/7 της Σύμβασης STCW

### Άρθρο IV της STCW Σύμβασης

Μέρος

- 1 Κείμενα νόμων, διαταγμάτων, εντολών, κανονισμών και οργάνων (άρθρο IV (1) (α) )
- 2 Λεπτομέρειες σχεπκά με τις σειρές μελέτης (άρθρο IV(1) (b) )
- 3 Εθνικές εξετάσεις και άλλες απαιτήσεις (άρθρο IV (1) (b) )
- 4 Δείγματα πιστοποιητικών (άρθρο IV (1) (c) )

#### Τμήμα Α-Ι/7 μέρος 1 του Κώδικα STCW

Πληροφορίες σχετικά με την Κυβερνητική οργάνωση

Μέρος

(τμήμα Α-Ι/7, παράγραφος 2.1)

- 6 Εξήγηση νομικών και διαικητικών μέτρων ( τμήμα Α-Ι/7, παράγραφος 2.2)
- 7 Δήλωση πολιτικών εκπαίδευσης , επιμόρφωσης, εξέτασης, αξιολόγησης και πιστοποίησης (τμήμα Α-Ι/7, παράγραφος 2.3)
- 8 Περίληψη εκπαιδευτικών σειρών, προγραμμάτων, εξετάσεων και αξιολογήσεων με πιστοποιητικό (τμήμα Α-Ι/7, παράγραφος 2.4)
- 9 Σύντομη περιγραφή διαδικασιών και όρων εξουσιοδότησης , διαπιστεύσεων και εγκρίσεων (τμήμα Α-Ι/7, παράγραφος 2.5)
  - 10 Κατάλογος χορηγηθέντων εξουσιοδοτήσεων, διαπιστεύσεων και εγκρίσεων (τμήμα Α-Ι/7, παράγραφος 2.6)
  - 11 Περίληψη διαδικασιών απαλλαγών (τμήμα Α-Ι/7, παράγραφος 2.7)
  - 12 Σύγκριση που διεξάγεται σύμφωνα με τον κανονισμό I/11 (τμήμα Α-I/7, παράγραφος 2.7 )
- 13 Σύντομη περιγραφή υποχρεωτικής εκπαίδευσης επιμόρφωσης και αναβάθμισης (τμήμα Α-Ι/7 ,παράγραφος 2.7

## Τμήμα Α-Ι/7, μέρος 2, παράγραφος 3 του Κώδικα STCW

Μέρος

- 14 Περιγραφή ρυθμίσεων ισοπμίας που υιοθετούνται σύμφωνα με το άρθρο ΙΧ (τμήμα Α-Ι/7, παράγραφος 3.1)
- 15 Περίληψη μέτρων που ελήφθησαν για να εξασφαλίζεται η συμμόρφωση με τον κανονισμό Ι/10 (τμήμα Α-Ι/7, παράγραφος 3.2)
- 16 Δείγμα αντίγραφο εγγράφων ασφαλούς επάνδρωσης που εκδίνονται για πλοία που απασχολούν ναυτικούς κατόχους εναλλακτικών πιστοπαιητικών σύμφωνα μα τον κανονισμό VII/1 (τμήμα Α-I/7, παράγραφος 3.3)

#### Τμήμα Α-Ι/7, μέρος 2, παράγραφος 4 του Κώδικα STCW

Μέρος

- 17 ναφορά αποτελεσμάτων ανεξάρτητων εκπμήσεων που διεξάγαντα σύμφωνα με τον κανονισμό Ι/8 που καλύπτα:
  - .1 Όρα αναφοράς εκτιμητών για τις ανεξάρτητες εκτιμήσεις
  - .2 Προσόντα και εμπειρία εκτιμητών
  - .3 Ημερομηνία και πλαίσιο εκτίμησης
  - .4 Δεν βρέθηκαν μη συμμορφώσεις
  - .5 Συνιστώμενα διορθωτικά μέτρα
  - .6 Συνιστώμενα μέτρα που διεξάγοντα
  - .7 Κατάλογος εκπαιδευτικών τνστιτούτων /κέντρων που καλύπτονται από Ανεξάρτητη εκτίμηση

## Τμήμα Α-Ι/7, μέρος 2, παράγραφος 6 του Κώἃ κα STCW

Μέρος

18 Εξήγηση νομικών και διακητικών μέτρων

(τμήμα Α-Ι/7, παράγραφος 6.1)

- 19 Δήλωση πολικών εκπαίδευσης, επιμόρφωσης, εξέτασης, αξιολόγησης και Πιστοποίησης (τμήμα Α-Ι/7 )
- 20 Περίληψη εκπαίδευτικών σειρών,προγραμμάτων, εξετάσεων και αξιολογήσεων με πιστοποιητικό (τμήμα Α-Ι/7, παράγραφος 6.3)
- 21 Περιγραφή υποχρεωτικής εκπαίδευσης επιμόρφωσης και αναβάθμισης (τμήμα Α-Ι/7, παράγραφος 6.4)
- 22 Σύγκριση που διεξάγεται σύμφωνα με τον κανονισμό Ι/Ν (τμήμα Α-Ι/7, παράγραφος 6.5)
- 2 Τα Συμβαλλόμενα Μέρη παρακαλούντα να περιλάβουν, στις αναφορές που απαιτούντα σύμφωνα με τον κανονισμό 1/7, μια ένδειξη των σχετικών οδηγιών που εμπεριέχοντα στο μέρος Β αυτού του Κώδικα, η παρατήρηση των οποίων έχει θεωρηθεί ότι δεν είναι πρακτική.

#### Τμήμα Β - 1/8

Οδηγίες όσον αφορά τα πρότυπα ποιότητας

- 1 Κατά την εφαρμογή των προτύπων παιότητας σύμφωνα με τις διατάξεις του κανονισμού 1/8 και του τμήματος Α-1/8 για τη διοίκηση του δικού της συστήματος πιστοποίησης κάθε Κρατος Μέλος θα πρέπει να λάβει υπόψη τα υπάρχοντα εθνικά ή διεθνή πρότυπα και να περιλάβει τα παρακάτω βασικά σταιχεία:
  - .1 Εκφρασμένη πολιτική όσον αφορά την παίστητα και τα μέσα με τα οποία αυτή η πολιτική πρόκειται να εφαρμοσθεί,
  - .2 Παιοτικό σύστημα που περιλαμβάνει την οργανωτική δομή, ευθύνες, διαδικασίες, διεργασίες και τα μέσα που είναι απαραίτητα για ποιοτική διοίκηση,
  - .3 Τις επιχειρησιακές τεχνικές και δραστηριότητες για να εξασφαλιστεί ποιοτικός έλεγχος,
  - .4 Διαδικασίες συστηματικής παρακολούθησης, με συμπερίληψη εσωτερικών αξιολογήσεων εξασφάλοης παιότητας, για να διασφαλιστεί ότι όλα α αντικείμενικοί σκοποί έχουν επιτεύχθεί, και
  - .5 Διαδικασίες περιοδικών εξωτερικών αξιολογήσεων παιότητας όπως περιγράφονται στις παρακάτω περιγράφους.
- 2 Στην θέσπιση προτύπων παιότητας για τη διοίκηση του εθνικού τους συστήματος πιστοποίησης αι Αρχές πρέπει να αναζητήσουν και εξασφαλίσουν ότι οι ρυθμίσεις που αποδέχοντα:
  - .1—Είναι επαρκώς ευέλικτες για να είναι σε θέση το σύστημα πιστοποίησης να λάβει υπόψη τις μεταβαλλόμενες ανάγκες της βιομηχανίας και να διευκολύνουν και ενθαρρύνουν την εφαρμογή νέας τεχνολογίας,
  - .2 Καλύπτουν όλα τα διακητικά θέματα που καθιστούν αποτελεσματικές τις διάφορες διατάξεις της Σύμβασης ιδιαίτερα των Κανονισμών Ι/2 έως Ι/15 και άλλες διατάξεις που καθιστούν δυνατή την έκδοση πιστοπαητικών υπηρεσίας και εξαιρέσεις και να αποσύρει, ακυρώνει και αναστέλλει πιστοπαιητικά,
  - .3 Περιλαμβάνουν τις ευθύνες της Αρχής για έγκριση εκπαίδευσης και αξιολόγησης σε όλα τα επίπεδα, από κύκλους σπουδών που οδηγούν σε πτυχίο, κύκλους σπουδών εκσυγχρονισμού γνώσεων για πιστοπαιητικά ικανότητας και σύντομους κύκλους σπουδών επαγγελματικής εκπαίδευσης, και
  - .4 Περιλαμβάνουν ρυθμίσεις για επιθεωρήσεις εξασφάλισης εσωτερικής παιότητας σύμφωνα με τη παράγραφο 1.4, που περιλαμβάνει εκτεταμένη αυτοανάλυση των διαικητικών διαδικασιών, σε όλα τα επίπεδα, για να μετρηθεί η επίτευξη των ορισθέντων αντικει μενικών σκοπών και να παρέχουν τη βάση για ανεξάρτητη εξωτερική αξιολόγηση που απαιτείται σύμφωνα με το τμήμα Α-Ι/8 παράγραφος 3.

Μοντέλο προτύπων πα ότητας για αξιολόγηση των γνώσεων, κατανόησης, δεξιοτήτων και κανότητας

3 Το μοντέλο προτύπων παιότητας για αξιολόγηση των γνώσεων κατανοήσεως, δεξιοτήτων και ικανότητας πρέπει να περιλαμβάνει τις συστάσεις αυτού του μέρους εντός του γενικού πλαισίου είτε:

- .1 ενός εθνικού σχεδίου αναγνώρισης εκπαίδευσης και επιμόρφωσης ή προτύπων παιότητας, ή
- .2 ένα εναλλακτικό μοντέλο προτύπων παιότητας που είναι αποδεκτό από τον Οργανισμό
- 4 Το παραπάνω μοντέλο προτύπων πα ότητας πρέπει να περιλαμβάνει :
  - .1 Μία πολιτική παιότητας που περιλαμβάνει υποχρέωση από το εκπαιδευτικό ίδρυμα ή την εκπαιδευτική μονάδα για την επίτευξη των δηλωθέντων από αυτό στόχων και αντικειμενικών σκοπών, και την επακόλουθη αναγνώριση από την σχετική αρχή πιστοποίησης ή προτύπων παιότητας,
  - .2 Εκείνες τις διακητικές λειτουργίες παιότητας που προσδιορίζουν και θέτουν σε ισχύ την πολιτική παιότητας και σχετίζονται με τους τομείς της εργασίας οι οποίοι έχουν επίπτωση στην ποιότητα των παρεχομένων υπηρεσιών, περιλαμβανομένων και των διατάξεων για τον προσδιορισμό της προόοδυ ενός κύκλου σπουδών ή προγράμματος,
  - .3 Κάλυψη παιοπκού συστήματος, όπου αυτό προσφέρεται, της ακαδημαϊκής και διαικηπικής οργανωπικής δομής, ευθυνών, διαδικασιών, διεργασιών και πόρων τόσο του προσωπικού όσο και του εξοπλισμού,
  - .4 Τις λειτουργίες παιοτικού ελέγχου που θα εφαρμόζονται σε όλα τα επίπεδα δραστηριοτήτων διδασκαλίας, εκπαίδευσης, εξετάσεων και αξιολόγησης και την οργάνωση και εφαρμογή τους για να εξασφαλισθεί η καταλληλότητά τους για τον σκοπό που επελέγησαν και επίτευξη των ορισθέντων από αυτές αντικειμενικών στόχων,
  - .5 Τις εσωτερικές διαδικασίες και επιθεωρήσεις διασφάλισης παιότητας α οποίες παρακολουθούν την έκταση κατά την οποία το Ιδρυμα ή η εκπαιδευτική μονάδα, επιτυγχάνει τους αντικειμενικούς σκοπούς των προγραμμάτων που εκτελεί και παρακολουθεί αποτελεσματικά τις διεργασίες παιοτικού ελέγχου που χρησιμοποιεί, και
  - .6 Οι ρυθμίσεις που γίνονται για περιοδικές εξωτερικές αξιολογήσεις ποιότητας που απαιτούνται σύμφωνα με τον κανονισμό 1/8 παράγραφος 2 και περιγράφονται στις παρακάτω παραγράφους, για τις οποίες το αποτέλεσμα των επιθεωρήσεων επιβεβαίωσης παιότητας αποτέλει βάση και σημείο εκκίνησης.
- 5 Κατά τη θέστιση προτύπων ποιότητας για εκπαίδευση, επιμόρφωση και προγράμματα αξιολόγησης, α υπεύθυνα οργανισμοί για την θέση σε ισχύ αυτών των προγραμμάτων θα πρέπει να λαμβάνουν υπόψη τα παρακάτω:
  - .1 "Όπου υπάρχουν διατάξεις για θεσπισμένη εθνική πιστοποίηση, ή παιοτικά πρότυπα εκπαίδευσης, τέταιες διατάξεις θα πρέπει να χρησιμοπαιούνται για κύκλους σπουδών που περιλαμβάνουν τη γνώση και κατανόηση των απαιτήσεων της Σύμβασης. Τα πρότυπα παιότητας θα πρέπει να εφαρμόζονται πόσο σε διαικητικό όσο και σε επιχειρησιακό επίπεδο δραστηριότητας και θα πρέπει να λαμβάνουν υπόψη πως διαικείται, οργανώνεται, αναλαμβάνεται και αξιολογείται για να εξασφαλιστεί όπ επιτυγχάνονται οι στόχοι που έχουν προσδιοριστεί.
  - .2 Όπου η κτήση μιας συγκεκριμένης δεβιότητας ή η ολοκλήρωση προσάιορισμένης εργασίας είναι ο πρωταρχικός αντικειμενικός σκοπός, τα πρότυπα παιότητας θα πρέπει να λαμβάνουν υπόψη κατά ποσόν χρησιμοπαιείται για το σκοπό αυτό πραγματικός ή εξομαωμένος εξοπλισμός και την καταλληλότητα των προσόντων και εμπειρίας των αβιολογητών για να εξασφαλιστεί η επίτευξη των καθορισθέντων προτύπων.
  - .3 Οι αξιολογήσεις εξασφάλισης εσωτερικής παιότητας πρέπει να περιλαμβάνουν εκτεταμένη αυτομελέτη του προγράμματος σε όλα τα επίπεδα, για παρακολούθηση της επίτευξης των αντικειμενικών σκοπών με την εφαρμογή των προτύπων παιότητας. Αυτές οι επιθεωρήσεις εξασφάλισης παιότητας πρέπει να αναφέρονται στον σχεδιασμό, μελέτη παρουσίαση και αξιολόγηση των προγραμμάτων καθώς επίσης τις διαδικασίες διδασκαλίας, μαθήσεως και επικανωνίας. Το αποτέλεσμα παρέχει τη βάση της απαιτούμενης ανεξάρτητης αξιολόγησης σύμφωνα με το τιμήμα Α-1/8 παράγραφος 3.

#### Η ανεξάρτητη αξιολόγηση

- 6 Κάθε ανεξάρτητη αξιολόγηση πρέπει να περιλαμβάνει ανεξάρτητη εξέταση όλων των δραστηριοτήτων πολότητας αλλά δεν θα πρέπει να αξιολογεί την ισχύ των ορισθέντων αντικειμενικών σκοπών. Η ομάδα αξιολόγησης θα πρέπει :
  - .1 να πραγματοπαεί την αβολόγηση σύμφωνα με αποδεδειγμένες εγγράφως διαδικασίες,
  - .2 να εξασφαλίζει ότι τα αποτελέσματα κάθε αξιολόγησης είναι αποδεδειγμένα εγγράφως και τίθενται υπ' όψιν εκείνων που είναι υπεύθυναι για τους τομείς που αξιολογούνται, και
  - .3 να ελέγχει ότι λαμβάνονται εγκαίρως μέτρα για την αποκατάσταση των οποιωνδήποτε ελλείψεων.
- 7 Ο σκοπός της αξιολόγησης είναι η παροχή ανεξάρτητης εκτίμησης της αποτελεσματικότητας των ρυθμίσεων των προτύπων παιότητας σε όλα τα επίπεδα. Στην περίπτωση εκπαιδευτικών ιδρυμάτων ή φορέα επιμόρφωσης, θα πρέπει να χρησιμοπαιείται αναγνωρισμένος ακαδημαϊκός φορέας ή σώμα ελέγχου προτύπων παιότητας ή Κυβερνητικό όργανο. Στην ομάδα αξιολόγησης θα πρέπει να παρέχονται εκ των προτέρων επαρκείς πληροφορίες για να έχει μία γενική άποψη των εργασιών που πρόκειται να κάνει. Σε περίπτωση σημαντικού εκπαιδευτικού ιδρύματος ή προγράμματος, τα παρακάτω θέμαται είναι ενδεικτικά των πληροφορών που πρέπει να δίνονται:
  - .1 Οι στόχοι του εκπαιδευτικού ίδρύματος,
  - .2 Λεπτομέρειες των ακαδημαϊκών και εκπαιδευτικών μεθόδων που χρησιμοπαιούνται,
  - .3 Οργανόγραμμα και πληροφορίες περί της σύστασης επιτροπών και συμβουλευτικών οργάνων,
  - .4 Πληροφορίες για τους σπουδαστές και το διδακτικό προσωπικό,
  - .5 Περγγραφή των εκπαιδευτικών εγκαταστάσεων και εξοπλισμού, και
  - .6 περιγραφή των πολιτικών και διαδικασιών στα παρακάτω:
    - .6.1 εσαγωγή σπουδαστών,
    - .6.2 ανάπτυξη νέων κύκλων σπουδών και αναθεώρηση των υπαρχόντων κύκλων σπουδών.
    - .6.3 στο σύστημα εξετάσεων, περιλαμβανομένων των αναθεωρήσεων και επιανεξετάσεων,
    - .6.4 πρόσληψη προσωπικού, εκπαίδευση, ανάπτυξη, αξιολόγηση και προαγωγή,
    - .6.5 ανατροφοδότηση πληροφοριών από σπουδαστές και βιομηχανία, και
    - .6.6. δραστηριοποίηση του προσωπικού σε έρευνα και ανάπτυξη

#### Υποβολή αναφοράς

- 8 Προτού υποβληθεί η τελική αναφορά, η ομάδα αξιολόγησης θα υποβάλει μία προσωρινή αναφορά προς τη διοίκηση επιδιώκοντας κρίσεις επί των αποτελεσμάτων της. Οταν ληφθούν οι κρίσεις, οι αξιολογητές θα πρέπει να υποβάλλουν την τελική τους αναφορά η οποία θα πρέπει:
  - .1 να περιλαμβάνει γενικές πληροφορίες όσον αφορά το ίδρυμα ή το πρόγραμμα εκπαίδευσης.
  - .2 να είναι πλήρης, δίκαιη και ακριβής,
  - .3 να τονίζει τα ισχυρά και ασθενή σημεία του ιδρύματος,
  - .4 να περιγράφει την διαδιακοία αξιολόγησης που ακολουθείται,
  - .5 να καλύπτει τα διάφορα στα χεία που διαπιστώνονται στην παράγραφο 4,

.6 να υποδεικνύει την έκταση συμμόρφωσης και μη συμμόρφωσης με τις απαιτήσεις της Συνθήκης και της αποτελεσματικότητας των προτύπων παιότητας για την εξασφάλιση επίτευξης των καθορισθέντων σκοπών και αντικειμενικών επιδιώξεων, και

.7 να παραθέτει με σαφήνεια τις περιοχές όπου ευρέθησαν παραλείψεις, να δίδει προτάσεις όσον αφορά την βελτίωση και να περιέχει οπααδήποτε άλλα σχόλια που οι αξιολογητές θεωρούν σχετικά.

**Τμήμα Β - Ι/9** Οδηγίες που αφορούν ιατρικά πρότυπα

#### ΙΑΤΡΙΚΗ ΕΞΕΤΑΣΗ ΚΑΙ ΠΙΣΤΟΠΟΙΉΣΗ

- 1 Τα Συμβαλλόμενα Μέρη κατά τη θέσπιση προτύπων και διατάξεων ιστρικής καταλληλότητας ναυπκών, θα πρέπει να λαμβάνουν υπόψη τις ελάχιστες φυσικές ικανότητες που παρατίθενται στον πίνακα Β-Ι/9 και τις οδηγίες που δίνονται στα πλαίσια αυτά του τμήματος, έχοντας υπόψη τα διαφορετικά καθήκοντα του ναυτικού
- 2 Τα Συμβαλλόμενα Μέρη, κατά τη θέστιση προτύπων και διατάξεων ιατρικής καταλληλότητας ναυτικού, θα πρέπει να ακολουθούν τις οδηγίες που περιέχονται στις εκδόσεις ΙΕΟ/ WHO Οδηγίες για Διεξαγωγή Προ Θάλασσας και Περιοδικών Εξετάσεων Ιατρικής Καταλληλότητας Ναυτικών , περιλαμβανομένων μεταγενέστερων εκδόσεων και άλλων εφαρμόσιμων διεθνών οδηγιών που εκδίνονται από τον Διεθνή Οργανισμό Εργασίας, το Διεθνή Ναυτιλιακό Οργανισμό ή τον Παγκόσμιο Οργανισμό Υγείας.
- 3 Κατάλληλα προσόντα και εμπειρία για ιατρούς που πραγματοπαιούν ιατρικές εξετάσεις καταλληλότητας ναυτικών μπορεί να περιλαμβάνουν επαγγελματικά προσόντα υγείας ή ναυτικής υγείας, εμπειρίας εργασίας ως ιατρός πλοίου ή ιατρός ναυτιλιακής εταιρίας ή εργασίας υπό την επίβλεψη ατόμου με τα προαναφερθέντα προσόντα ή εμπειρία.
- 4 Οι εγκαταστάσεις όπου πραγματοπαούνται εξετάσεις ιατρικής ικανότητας πρέπει να έχουν τον απαιτούμενο εξοπλισμό και τις ευκόλλες για να πραγματοπαιούν τις εξετάσεις ιατρικής καταλληλότητας των ναυτικών.
- 5 Οι Διοικήσεις θα πρέπει να εξασφαλίζουν ότι αναγνωρισμένα προσοντούχοι ιατροί θα απολαμβάνουν πλήρη επαγγελματική ανεξαρτησία κατά την ιατρική τους εξέταση όταν ανλαμβάνουν διαδικασίες ιατρικής εξέτασης.
- 6 Τα άτομα που κάνουν αίτηση για ιατρικό πιστοπαιητικό θα πρέπει να παρουσιάζουν στον αναγνωρισμένο προσοντούχο ιατρό κατάλληλα έγγραφα ταυτότητας για την εξακρίβωση ταυτότητας. Θα πρέπει επίσης να παραδίδουν το προγούμενο ιατρικό πιστοπαιητικό τους.
- 7 Κάθε αρχή έχει τη διακριτική ευχέρεια να εκδίδει έγγραφο απόκλισης ή απαλλαγής από οποιοδήποτε από τα πρότυπα που καθορίζονται στον πίνακα Β-1/9 παρακάτω και βασίζεται σε αξιολόγηση ιατρικής εκτίμησης και σε όποιες σχετικές πληροφορίες που αφορούν την δυνατότητα προσαρμογής ενός ατόμου στις απαιτούμενες συνθήκες και την αποδεδειχμένη ικανότητα του να εκτελεί ικανοπαιητικά τις εργασίες που του ανατίθενται στο πλοίο.
- 8 Τα πρότυπα ιατρικής καταλληλότητας θα, όσο είναι δυνατό, καθορίζουν αντικειμενικά κατήρια όσον αφορά την καταλληλότητα για θαλάσσια ύπηρεσία, λαμβάνοντας υπόψη πρόσβαση στις ιατρικές εγκαταστάσεις και ιατρική εμπειρία σε πλοία, Θα πρέπει , συγκεκριμένα, να ορίζουν τις συνθήκες υπό τις οποίες αι ναυτικοί των οποίων πιθανώς κινδυνεύει η ζωή τους λόγω ιατρικών συνθηκών και ότι ελέγχονται με φάρμακα και μπορεί να τους επιτρέπεται να συνεχίσουν την υπηρεσία τους στη θάλασσα.
- 9 Τα ναυτικά πρότυπα θα πρέπει επίσης να αναγνωρίζουν ιδιαίτερες ιατρικές συνθήκες, όπως αχρωματοψία, η οποία μπορεί να αποκλείουν τους ναυτικούς από την κατοχή συγκεκριμένων θέσεων στο πλοίο.
- 10 Τα ελάχιστα πρότυπα ορατότητας κατά την εκτέλεση υπηρεσίας σε κάθε οφθαλμό για όραση απόστασης χωρίς βοήθεια πρέπει να είναι τουλάχιστον 0,1\*.
- 11 Τα άτομα που απαιτούν την χρήση γυαλιών ή φακών επαφής για να εκτελέσει τα καθήκοντα θα πρέπει να έχουν επιπλέον ζευγάρι ή ζευγάρια γυαλιών, όπως απαιτείται, διαθέσιμα εύκολα στο πλοίο. Όποια ανάγκη να φορούν οπτικά βοηθήματα πρέπει να πληροί απαραίτητα πρότυπα πρέπει να καταγράφεται στο πιστοπαιητικό ιατρικής καταλληλότητας που εκδίδεται.

<sup>\*</sup> Η πμή δίνεται σε δεκαδικό συμβολισμό Snellen.

12 Δοκιμές χρωματικής όρασης πρέπει να είναι σύμφωνα με τη Διεθνή Σύσταση για Απατήσεις Χρωματικής όρασης για Μεταφορά, που εκδόθηκε από τη Διεθνή Επιτροπή Εκκαθάρισης ( CIE 143-2001 που περιλαμβάνει όποιες μεταγενέστερες εκδόσεις ) ή ισότιμες μεθόδους δοκιμής.

#### Πίνακας Β-Ι/9

## Αξιολόγηση ελάχι στου επιπέδου εισόδου και εσωτερικής υπηρεσίας φυσικών ι κανοτήτων για ναυτικούς

Καθήκοντα, λειτουργίες, γεγο- νός ή όρα	Σχετική φυσικήικανότητα	Ένας ι ατρικός εξεταστής πρέπε να ι κανοπα είτα ότι ο υποψή- φιος
Κινήσεις ρουτίνας γύρω από το σκάφος : - Στο κατάστρωμα - Ανάμεσα στα επίπεδα - Ανάμεσα στα διαμερίσματα  Η σημείωση Ι που εφαρμόζεται σε αυτή την	Διατήρηση τσορροπίας και ευκνησίας Ανέβασμα και κατέβασμα κάθετων σκά- λων και χώρων κλιμακοσιασίου Διασκελισμός στομίων (π.χ Σύμβαση Γραμμών Φόρτωσης απαιτεί τα στόμια να είναι ύψους 600mm) Άναγμα και κλείσιμο υδατοστεγών θυρών	Δεν έχο καμία ενόχληση ισορροπίας. Δεν έχο καμία βλάβη ή ασθένοια που εμποδίζοι πς σχεπκές κινήσοις και πς φυσικές δρα- στηρότητες. Μπορεί χωρίς βοήθοια να: - Σκαρφαλώνοι κάθετες σκάλες και πς σκάλες κλιμακοστασίου - Διασκελίζοι υφηλές κρηπίδες - Χορίζεται συστήματα κλοισίματος θύρας
Καθήκοντα ρουτίνας στο πλοίο: - Χρήση εργαλείων δα χαρός - Μετακίνηση προμηθαών πλαίου - Γενικές εργασίες - Λατουργία βαλβίδων - Τήρηση τετράωρης φυλακής - εργασία σε περιορισμένο χρόνο - Ανταπόκριση σε συναγερμούς, προασισια όσες και οδηγίες - Προφορική επαικαινωνία	Δύναμη , επιδεβότητα και αντοχή χειρισμού μηχανικών συσκευών Ανασήκωμα, σύρα μο και μεταφορά βάρους φορτίου (πχ 18 kg)  Να μπορεί να φτάνει σε υψηλά επίπεδα Να στέκεται , περπατά και να παραμένει σε εταιμότητα για μεγάλη χρονική περίοδο Εργασία σε περιορισμένους χώρους και μετακίνηση μέσα από απαγορευμένα ανοίγματα στους χώρους φορτίου και στις εξόδους διαφυγής έκτακτης ανάγκης να έχουν τις ελάχιστες διαστάσεις 600mm x 600mm-SOLAS κανονισμός 3.6.5.1)  Να μπορεί να διακρίνει οπτικά αντικείμενα, σχήματα και σημάδια Να μπορεί να ακούει προειδοπαιήσεις και οδηγίες	Δεν έχα καθορισμένη εξασθένηση ή δαγνωσμένητατα κή κατάσταση που μαώνα την ικανότητά του να εκτελεί καθήκοντα ρουτίνας σημαντικά για την ασφαλή λατουργία του πλοίου  Να έχε ικανότητα να : - εργάζεται με τα χέρια ανυψωμένα - να στέκονται και να περιπατούν για μεγάλη χρονική περίοδο - να ασέρχονται σε περιορισμένους χώρους - να πληροί πρότυπα όρασης (πίνακας Α-1/9) - να πληροί πρότυπα ακούστικής δενότητας που καθορίζονται από την αρμόδα αρχή να λαμβάνει υπόψη διαεθνείς οδηγίες - να συζητήσει φυσιολογικά
Καθήκοντα έκτακτης ανάγκης στο πλοίο: - Διαφυγή Πυρόσβεση - Εκκένωση	περγραφή Να φορά το σωσίβιο γιλέκο ή στολή κατά- δυσης Διαφυγή από χώρους γεμάτους με καπνό Συμμετοχή σε καθήκοντα πυρόσβεσης, περιλαμβάνοντας χρήση αναπνευστικής Συμμετοχή στις διαδικασίες εκκένωσης πλοίου	Δεν έχει καθορισμένη βλάβη ή ἄαγνωσμένη ιατρική κατάσταση που μειώνει την ικανότητά να εκτελεί καθήκοντα έκτακτης ανάγκης σημαντικά για την ασφαλή λειτουργία του πλοίου  Έχει την ικανότητα να:  - Φορά σωστικό γιλέκο ή ατολή κατάδυσης  - Βαδίζει με τα τέσσερα  - Αισθάνεται τις ᾶαφορές στη θερμοκρασία  - Χειρίζεται εξοπλισμό πυρόσβεσης
Η σημείωση 2 ισχύει σε αυτή την στήλη		- Φορά αναπνευστική συσκευή ( όπου απαιτείται ως μέρος των καθηκό- ντων)

#### Σημειώσεις:

- 1 Σερές 1 και 2 του ανωτέρω πίνακα περιγράφει (α) τακτικά καθήκοντα πλοίου, λειτουργίες, περιστατικά και συνθήκες, (β) τις αντίσταχες φυσικές ι κανότητες που μπορεί να θεωρούνται απαραίτητες για την ασφάλεια του ναυτικού, των άλλων μελών του πληρώματος και του πλοίου, και (γ) υψηλού επιτέδου κριτήραι από ειδικευμένους ι ατρούς εξακαβώνοντας την ιστρική κατάσταση, λαμβάνοντας υπόψη τα διαφορετικά καθήκονται των ναυτικών και τη φύση της εργασίας στο πλοίο όπου εργάζονται.
- 2 Σερά 3 του ανωτέρω πίνακα περιγράφει (α) τακτικά καθήκονται του πλοίου,λειτουργίες, γεγονότα και καταστάσεις (β) τις αντίσταχες φυσικές εκανότητες που μπορεί ναι θεωρούνται απαραίτητες για την ασφάλεια του ναυτικού, των άλλων μελών του πληρώματος και του πλοίου, και (γ) υψηλού επιπέδου και τήρα από ειδικευμένους εατρούς εξακριβώνοντας την εατρική κατάσταση , λαμβάνοντας υπόψη τα διαφορετικά καθήκοντα των ναυτικών και τη φύση της εργασίας στο πλοίο όπου εργάζονται.
  - 3 Αυτός ο πίνακας δεν έχει στόχο να αναφέρει όλες τις πιθανές καταστάσεις του πλοίου ή πιθανές ιστρικές καταστάσεις απόλλαγής. Τα Μέρη θα πρεπεί να καθορίζουν φυσικές ικανότητες που ισχύυν στην κατηγορία ναυτικών (όπως «Αξιωματικός

Καταστρώματος» και «προσωπικό μηχανής»). Ο ειδικές συνθήκες των ατόμων και για εκείνους που έχουν ειδικευμένα ή

- περιορισμένα καθήκοντα θα πρέπα να λαμβάνοντα τδιαίτερα υπόψη. 4 Εάν υπάρχα συφιβολία ,ο ειδικευμένος τατρός θα πρέπα να προσδιορίζα το βαθμό ή την σοβαρότητα σχετικής βλάβης μέσω αντικαμενικών δοκιμών, όπου διατίθενται απαραίτητες δοκιμές ή παραπέμποντας στον ναυτικό για περαιτέρω αφολόγη-
- 5 Ο όρος «βοήθεια» σημαίνει την χρήση άλλου ατόμου για την ολοκλήρωση καθήκοντος.
- 6 Ο όρος «καθήκοντα έκτακτης ανάγκης» χρησιμοπαιείται για να καλύψει όλα τα πρότυπα έκτακτης ανάγκης ανταπόκρισης καταστάσεων όπως εγκατάλειψη πλοίου η πυρόσβεση καθώς επίσης και διαδικασίες που ακολουθούνται από κάθε ναυτικό για να διασφαλίσει ασφαλή διαβίωση.

#### Τμήμα Β-1/10

Οδηγίες όσον αφορά την αναγνώριση πιστοποιητικών

- 1 Εκπαίδευση που πραγματοπαιείται σύμφωνα με την Σύμβαση STCW που δεν οδηγεί σε έκδοση πιστοπαητικού ικανότητας και στο οποίο πληροφορίες που παρέχονται από το Μέρος βρίσκονται στην Επιτροπή Ναυπκής Ασφάλειας για να θέσει σε πλήρη και ολοκληρωπκή ισχύ την Σύμβαση σύμφωνα με τον Κανονισμό Ι/7 , παράγραφος 2 μπορεί να είναι αποδεκτές ιαπό άλλα Συμβαλλόμενα Μέρη στην Σύμβαση καθώς πληροί τις σχετικές απαιτήσεις εκπαίδευσης
- 2 Διευθυντικές Διαικήσεις θα εκδίδουν έγγραφα αποδεικτικά που αναφέρονται στον κανονισμό !/10 , παράγραφος 5 για να καθιστάτικανές τις αρχές του Κράτους λιμένα ελέγχου να αποδεχθεί το ίδιο αντί θεώρησης πιστοποιητικού που εκδόθηκε από άλλο Μέρος για περίοδο τριών μηνών από την ημερομηνία έκδοσης , παρέχοντας τις ακόλουθες πληροφορίες:
  - .1 όνομα ναυτικού
  - .2 ημερομηνία γέννησης
  - .3 αριθμός πρωτότυπου Πιστοποιητικού Ικανότητας
  - .4 ειδικότητα
  - .5 περιορισμοί
  - .6 λεπτομέρειες επαφής της Διοίκησης
  - .7 ημερομηνίες έκδοσης και λήξης
- 3 Αυτά τα αποδεκτικά σταχεία μπορεί να διατίθενται από ηλεκτρονικά μέσα

#### Τμήμα Β-Ι/11

Οδηγίες όσον αφορά την ανανέωση των πιστοποιητικών

- 1 Οι κύκλοι σπουδών που απαιτούνται από τον κανονισμό Ι/11 θα πρέπει να περιλαμβάνουν τις σχετικές αλλαγές στη ναυτική νομοθεσία ,τεχνολογία και συστάσεις σχετικές με την ασφάλεια της ανθρώπινης ζωής στη θάλασσα και την προστασία του θαλάσσιου περιβάλλοντος.
- 2 Τα τέστ μπορεί να είναι γραπτά ή προφορικά , η χρήση εξομαωτών ή άλλων κατάλληλων μέσων.
- 3 Εγκεκριμένη θαλάσσια υπηρεσία που αναφέρεται στο τμήμα Α-Ι/ΙΙ, παράγραφος 1 μπορεί να υπηρετεί σε βαθμό κατώτερου αξιωματικού αιτό αυτό τιου αναφέρεται στο πιστοποιητικό κατόχου.
- 4 Εάν γίνεται αίτηση για ανανέωση πιστοπαιητικού που αναφέρεται στην παράγραφο -1 του κανογισμού Ι/11 μέσα σε διάστημα έξι μηνών πριν από την λήξη τοου πιστοπαιητικού, το πιστοπαιητικό μπορεί να ανανεωθεί έως το έτος ισχύος του ή επέκταση ισχύος του πιστοπαιητικού.

#### Τμήμα Β-Ι/12

Οδηγίες που αφορούν την χρήση προσομοιωτών

1 Οταν χρησιμοπαούνται προσομαωτές για εκπαίδευση ή αξιολόγηση ικανότητας οι παρακάτω οδηγίες θα πρέπει να λαμβάνονται υπόψη κατά τη διεξαγωγή κάθε τέταιας εκπαίδευσης ή αφολόγησης.

#### ΕΚΠΑΙΔΕΥΣΗ ΚΑΙ ΑΞΙΟΛΟΓΉΣΗ ΣΕ ΠΑΡΑΤΗΡΗΣΗ ΚΑΙ ΥΠΟΤΥΠΩΣΗ ΡΑΝΤΑΡ

- 2 Εκπαίδευση και αφολόγηση στην παρατήρηση και υποτύπωση ραντάρ θα πρέπε:
  - .1 να περιλαμβάνει την χρήση εξοπλισμού προσομοίωσης ραντάρ, και

- .2 να συμμορφώνεται με πρότυπα που δεν είναι κατώτερα αυτών που παρατίθενται στις παραγράφους 3 έως 11 παρακάτω.
- 2 Επιδείξεις και πρακτική άσκηση στην παρατήρηση ραντάρ πρέπει να εκτελούνται, όπου απαιτείται, σε παραγματικό εξοπλισμό ναυτιλιακού ραντάρ, περιλαμβανομένης της χρήσης απομιμητών. Οι ασκήσεις υποτύπωσης θα πρέπει κατά προτίμηση να πραγματοποιούνται σε πραγματικό χρόνο, προκειμένου να αυξηθεί η ενημέρωση του εκπαιδευόμενου όσον αφορά τους κινδύνους από την μη συνεχή χρησιμοποίηση των σταιχείων του ραντάρ και για να βελιτωθούν αι τεχνικές της υποτύπωσης σε πρότυπο υποτύπωσης ραντάρ που είναι απαραίτητο για την ασφαλή εκτέλεση ελλιγμών αποφυγής σύγκρουσης σε πραγματικές συνθήκες πλου.

#### Γενικά

## Παράγοντες που επηρεάζουν την απόδοση και την ακρίβεια

- 4. Πρέπει να αποκτηθεί βασική κατανόηση των αρχών του ραντάρ και πλήρης πρακτική γνώση των:
  - .1 Μέτρηση αποστάσεων και διοπτεύσεων, χαρακτηριστικά της συσκευής ραντάρ που καθορίζουν την παιότητα απεικόνισης, κεραιών του ραντάρ, πολικά διαγράμματα, των επιπτώσεων της ισχύος που ακτινοβολείται σε κατευθύνσεις εκτός της κύριας δέσμης, μία μη τεχνική περιγραφή του συστήματος του ραντάρ περιλαμβανομένων παραλλαγών στα χαρακτηριστικά που εμφανίζονται σε διαφορετικούς τύπους συσκευών ραντάρ, διατάξεις ελέγχου απόδοσης και παραγόντων της συσκευής που επηρεάζουν την μεγίστη και ελαχίστη εμβέλεια ανιχνεύσεως και την ακρίβεια των πληροφοριών.
  - .2 Τις τρέχουσες προδιαγραφές λειτουργίας ναυτικών ραντάρ που έχουν γίνει αποδεκτές από τον Οργανισμό.
  - .3 Τις επιπτώσεις από την θέση της κεραίας του ραντάρ, τομείς σκιάς και κυκλικοί τομείς μειωμένης ευαισθησίας, ψευδοηχοί, επιπτώσεις του ύψους της κεραίας στην εμβέλεια ανίχνευσης, του σημείου εγκατάστασης των μονάδων ραντάρ και αποθήκευσης εξαρτημάτων κοντά σε μαγνητικές πυξίδες, περιλαμβανομένων των ασφαλών αποστάσεων από μαγνητική πυξίδα, και
  - .4 Τους κινδύνους της ακτινοβολίας και τα προστατευτικά μέτρα ασφαλείας που πρέπει να λαμβάνονται στην περιοχή της κεραίας και σε ανακτούς κυματοδηγούς

## Αναγνώριση εσφαλμένων πληροφοριών, περιλαμβανομένων των εσφαλμένων ηχών κα θαλασσίων επιστροφών

- 5 Γνώση όσον αφορά τους περιορισμούς ανίχνευσης στόχου είναι ουσιώδης, για να είναι σε θέση ο παρατηρητής να υπολογίσει τους κινδύνους που προέρχονται από αποτυχία ανίχνευσης στόχων. Θα πρέπει να δίνεται έμφαση στους παρακάτω παράγοντες:
  - .1 Πρότυπα απάδασης του εξοπλισμού,
  - .2 Φωτανότητα, απολαβή και ρυθμίσεις ελέγχου οπτικού ενισχυτή (video),
  - .3 Ορίζοντας ραντάρ,
  - .4 Μέγεθος, σχήμα και σύσταση των στόχων,
  - .5 Επιπτώσεις των κινήσεων του πλοίου κατά την διάρκεια του πλου,
  - .6 Συνθήκες διάδοσης,
  - .7 Μετεωρολογικές συνθήκες, παρεμβολές λόγω θαλασσίων επιστροφών ή λόγω βροχής,
  - .8 Ρυθμίσεις ελέγχου επιστροφών,
  - ,9 Τομείς σκιάς, και
  - .10 Παρεμβολή από ραντάρ σε ραντάρ.

6 Πρέπει να αποκτάται γνώση όσον αφορά τους παράγοντες αι οποίαι ενδεχομένως οδηγήσουν σε εσφαλμένη ερμηνεία περιλαμβανομένων των εσφαλμένων ηχών,επιπτώσεις λόγω γειτνίασης με πυλώνες και μεγάλες υπερκατασκευές,επιπτώσεις γραμμών μεταφοράς ισχύος που διασχίζουν ποτάμια και εκβολές ποταμών, ηχοί από μακρινούς στόχους που συμβαίνουν σε επόμενη διαδρομή.

7 Πρέπει να αποκτάται γνώση όσον αφορά τα βοηθήματα ερμηνείας περιλαμβανομένων κωνικών ανακλαστήρων και ραδιοφάρων ραντάρ. Ανίχνευση και αναγνώριση στόχων ξηράς και επιπτώσεις των τοπογραφικών χαρακτηριστικών, επιπτώσεις του μήκους του παλμού και πλάτους της δέσμης. Εμφανείς και δυσδιάκρια στόχα ραντάρ, παράγοντες που έχουν επιπτώσεις στην ένταση της ηχούς από στόχους.

#### Πρακτική

#### Ρύθμιση και έλεγχος οθόνων

- 8 Πρέπει να αποκτάται γνώση σε:
  - .1 διάφορους τρόπους απεικόνισης σε οθόνη ραντάρ, σχετική απεικόνιση, απεικόνιση πλώρης άνω (head-up), πορεία άνω και βορράς άνω, σταθεροποιημένη σχετική και αληθής κίνηση,
  - .2 πς επιπτώσεις των σφαλμάτων όσον αφορά την ακρίβεια των απεικονιζομένων πληροφοριών, πς επιπτώσεις σφαλμάτων της πυξίδας σε σταθεροποιημένη και αληθή κίνηση που εμφανίζονται στην οθόνη, επιπτώσεις σφαλμάτων των δρομομέτρων στην οθόνη αληθούς κίνησης και οι επιπτώσεις μη ακριβούς ρύθμεσης της ταχύτητας με το χέρι σε απεικόνιση αληθούς κίνησης,
  - .3 μέθοδα εντοπισμού εσφαλμένης ρύθμισης της ταχύτητος στους ελέγχους αληθούς κίνησης, α επιτώσεις του θορύβου του δέκτη που περιορίζουν την ικανότητα απεικόνισης στην οθόνη ασθενείς επιστροφές, επιπτώσεις λόγω υπερβολικής στάθμης θορύβου του δέκτη κ.λ.π. ρύθμιση των διακοπτών και διατάξεων ελέγχου, κριτήρια αξιολόγησης ορθών ρυθμίσεων, αναγκαιότητα ρυθμίσεων με την ορθή σειρά και α συνέπειες από κακές ρυθμίσεις, ο εντοπισμός εσφαλμένων ρυθμίσεων και η αποκατάστασή των:
    - .3.1 ρυθμίσεων που επηρεάζουν την εμβέλεια ανίχνευσης, και
    - .3.2 ρυθμίσεων που έχουν επιπτώσεις στην ακρίβεια,
  - .4 Οι κίνδυνοι χρησιμοποίησης του εξοπλισμού ραντάρ με κακούς ρυθμισμένους ελέγχους, και
  - .5 Η ανάγκη συχνών ελέγχων της απόδοσης και η σχέση μεταξύ του δείκτη απόδοσης και εμβέλειας ανίχνευσης της συσκευής του ραντάρ.

#### Εμβέλαα και διόπτευση

- 9 Πρέπει να αποκτώνται γνώσεις σε :
  - .1 Μεθόδους μέτρησης αποστάσεως, δακτύλια μέτρησης απόστασης και μεταβλητός μετρητής απόστασης,
  - .2 Η ακρίβεια εκάστης μεθόδου και η σχετική ακρίβεια διαφορετικών μεθόδων,
  - .3 πως εμφανίζονται στην οθόνη τα σταιχεία απόστασης, αποστάσεις σε καθορισμένα διαστήματα, ψηφιακός μετρητής, διαβαθμισμένη κλίμακα,
  - .4 Οι μέθοδα μέτρησης διοπτεύσεων, περιστρεφόμενος δείκτης σε διαφανή δίσκο που καλύπτει την οθόνη, ηλεκτρονικός δείκτης διόπτευσης και άλλες μέθοδα,
  - .5 Ακρίβεια διόπτευσης και ανακρίβειες λόγω: παράλλαξης, μετακίνησης της γραμμής πλώρης, κακής ρυθμίσεως του κέντρου,
  - .6 πως εμφανίζονται τα σταχεία διόπτευσης, διαβαθμισμένη κλίμακα και ψηφιακός μετρητής, και
  - .7 ανάγκη τακτικού ελέγχου ανακριβειών απόστασης και διόπτευσης, μέθοδα ελέγχου ανακριβειών και διόρθωση ή ανοχή αυτων.

## Τεχνικές υποτύπωσης και έννοιες σχετικής κίνησης

10 Πρέπει να γίνεται πρακτική εξάσκηση σε τεχνικές υποτύπωσης με το χέρι, περιλαμβανομένης της χρήσης υποτυπωτών ανάκλασης με αντικειμενικό σκοπό να εξασφαλιστεί λεπτομερής κατανόηση της συσχέπισης της κίνησης μεταξύ του ιδίου πλοίου και άλλων πλοίων, περιλαμβανομένων των επιπτώσεων των ελλιγμών που γίνονται για να αποφευχθεί σύγκρουση. Στα αρχικά στάδια αυτής της εκπαίδευσης πρέπει να εκπονούνται απλές ασκήσεις υποτύπωσης προκειμένου να επιπευχθεί πολύ καλή εκτίμηση της γεωμετρίας υποτύπωσης και των ενναιών της σχετικής κίνησης. Ο βαθμός πολυπλοκότητας των ασκήσεων πρέπει να αυξάνει κατά τη διάρκεια της εκπαίδευσης έως ότου ο εκπαίδευσμένος κατανοήσει όλες τις πλευρές του θέματος. Η ικανότητα μπορεί να προαχθεί κατά τον καλύτερο τρόπο υποβάλλοντας τον εκπαίδευσμενο σε ασκήσεις πραγματικού χρόνου που πραγματοποιούνται σε προσομαιωτή ή με την χρήση άλλων αποτελεσματικών μέσων.

#### Εντοτιι σμός κρίσι μων στόχων

- 11 Πρέπει να επιτευχθεί λεπτομερής γνώση :
  - .1 Προσδιορισμού στίγματος από στόχους ξηράς και θαλάσαιους σημαντήρες,
  - .2 Ακρίβεια του προσδιορισμού του στίγματος χρησιμοποιώντας απόσταση και διόπτευση,
  - .3 Σημασία επιβεβαίωσης της ακρίβειας του ραντάρ με άλλα βοηθήματα ναυσιπλοΐας, και
  - .4 Αξία καταγραφής αποστάσεων και διοπτεύσεων σε συχνά, τακτικά χρονικά διαστήματα όταν γίνεται χρήση του ραντάρ ως βοήθημα αποφυγής συγκρούσεων.

## Πορεία κα ταχύτητα άλλων πλοίων

- 12 Πρέπει να επιτευχθεί λεπτομερής γνώση των:
  - .1 διαφόρων μεθόδων με τις οποίες μπορούν να βρεθούν η πορεία και ταχύτητα άλλων πλοίων από καταγεγραμμένες αποστάσεις και διοπτεύσεις, περιλαμβανομένων των παρακάτω:
    - .1.1 της ασταθούς σχεπκής υποτύπωσης,
    - .1.2 της σταθεράς σχετικής υποτύπωσης, και
    - .1,3 της αληθούς υποτύπωσης, κα
  - .2 Τη σχέση μεταξύ οπτικών παρατηρήσεων και ραντάρ, περιλαμβανομένων λεπτομερειών και την ακρίβεια εκτιμήσεων πορείας και ταχύτητας άλλων πλοίων και την ανίχνευση αλλαγών στις κινήσεις άλλων πλοίων.

## Χρόνος και απόσταση για άφιξη στο πλησιέστερο σημείο προσέγγισης, κατά την προσέγγιση ή απομάκρυση από άλλα πλοία

- 13 Πρέπει να επιτευχθεί λεπτομερής γνώση των :
  - .1 Χρήσης καταγεγραμμένων σταχείων για να επιτευχθεί:
    - .1.1 Μέτρηση της απόστασης του σημείου εγγυτέρας προσέγγισης και διόπτευσης,
    - .1.2 Χρόνο της εγγυτέρας προσέγγισης, και
  - .2 Σημασίας των συχνών και κανονικών παρατηρήσεων

## Ανίχνευση αλλαγών πορείας και ταχύτητας άλλων πλοίων

- 14. Πρέπει να επιτευχθεί λεπτομερής γνώση των
  - .1 επιπττώσεων των αλλαγών πορείας και/ή ταχύτητας άλλων πλοίων στα ίχνη τους επί της οθόνης,

- .2 καθυστέρησης μεταξύ αλλαγής πορείας και ταχύτητας και εντοπισμός αυτής της αλλαγής, και
- .3 ανδύνου μικρών αλλαγών σε σύγκριση με σημαντικές αλλαγές πορείας και ταχύτητος σε σχέση με το ρυθμό και την ακρίβεια ανίχνευσης.

#### Ετεπτώσες των αλλαγών της πορείας ή ταχύτητας του ιδίου πλοίου ή και των δύο

15 Λεπτομερής γνώση των επιπτώσεων στην οθόνη σχετικής κίνησης, των κινήσεων του ιδίου πλοίου και οι επιπτώσες των κινήσεων άλλων πλοίων και τα πλεονεκτήματα σταθεροποίησης της πυξίδας σε οθόνη σχετικής απεικόνησης.

16 Ως προς τις οθόνες αληθούς κίνησης, πρέπει να επιτευχθεί λεπτομερής γνώση των :

- .1 επιπώσεων των ανακριβειών των:
  - .1.1 ρύθμεσεων ταχύτητας και πορείας, και
  - .1.2 στα χείων σταθεροποίησης της πυξίδας που τροφοδοτούν οθόνη σταθεροπα ημένης σχεπκής κίνησης,
- .2 επιπτώσεων των αλλαγών πορείας ή ταχύτητας του πλοίου ή και των δύο στα ίχνη άλλων πλοίων που εμφανίζονται στην οθόνη, και
- .3 σχέσης της ταχύτητας ως προς τη συχνότητα των παρατηρήσεων.

## Εφαρμογή των Διεθνών Κανονισμών Πρόληψης συγκρούσεων στη Θάλασσα,1972, όπως τροποτα ήθηκε

- 17 Θα πρέπει να επιτευχθεί πλήρης κατανόηση της σχέσης των Διεθνών Κανονισμών Πρόληψης Συγκρούσεων στη θάλασσα,1972, όπως τροποποιήθηκε σχετικά με τη χρήση του ραντάρ περιλαμβανομένων:
  - .1 των ενεργειών αποφυγής σύγκρουσης, κίνδυνα από υποθέσεις που έγιναν με βάση ανεπαρκείς πληροφορίες και οι κίνδυναι λόγω μικρών αλλαγων πορείας ή ταχύτητας,
  - .2 των πλεονεκτημάτων ταχύτητας ασφαλείας όταν γίνεται χρήση του ραντάρ για να αποφευχθεί σύγκρουση,
  - .3 της σχέσης ταχύτητας ως προς την εγγυτέρα απόσταση προσέγγισης και χρόνου και τα χαρακτηριστικά ελιγμών διαφόρων τύπων πλοίου,
  - .4 της σημασίας των επιμελών αναφορών των παρατηρήσεων του ραντάρ και τον ακριβή προσδιορισμό των διαδικασιών αναφορών ραντάρ,
  - .5 της χρήσης του ραντάρ σε αίθριο καιρό, για να γίνει εκτίμηση των ικανοτήτων και περιορισμών, σύγκριση του ραντάρ και των οπτικών παρατηρήσεων και επίτευξη αξιολόγησης όσον αφορά τη σχετική ακρίβεια των πληροφοριών,
  - .6 της ανάγκης έγκαιρης χρησιμοποίησης του ραντάρ σε αίθριο καιρό κατά τη νύκτα και όταν υπάρχουν ενδείξεις ότι η ορατότητα πρόκειται να μειωθεί,
  - .7 της σύγκρισης των χαρακτηριστικών που εμφανίζονται σε οθόνη ραντάρ με χαρακτηριστικά που έχουν χαρτογραφηθεί, και
  - .8 της σύγκρισης των επιπτώσεων των διαφορών μεταξύ των διαφόρων κλιμάκων εμβέλειας.

## ΕΚΠΑΙΔΕΥΣΗ ΚΑΙ ΑΞΙΟΛΟΓΉΣΗ ΣΤΗΝ ΕΠΙΧΕΙΡΗΣΙΑΚΉ ΧΡΉΣΗ ΤΩΝ ΒΟΗΘΗΜΑΤΩΝ ΑΥΤΟΜΑΤΟΥ ΥΠΟΤΥΠΩΣΗΣ ΡΑΝΤΑΡ (ARPA)

18 Εκπαίδευση και αξιολόγηση στην επιχειρησιακή χρήση των βοηθημάτων αυτόματου υποτύπωσης ραντάρ θα πρέπει:

- .1 να απαιτείται πριν από την ολοκλήρωση της εκπαίδευσης σε παρατήρηση ραντάρ και υποτύπωση ή να συνδυάζουν αυτή την εκπαίδευση με την εκπαίδευση που παρατίθεται στις παραγράφους 19 έως 35 παρακάτω\*,
- .2 Να περιλαμβάνει την χρήση εξοπλισμού προσομοίωσης ΑΡΡΑ, και
- .3 Να ανταποκρίνεται σε πρότυπα που δεν είναι υποδεέστερα εκείνων που παρατίθεται στις παραγράφους 19 έως 35 παρακάτω:

19 Όπου εκπαίδευση σε ARPA παρέχετα ως τμήμα της γενικής εκπαίδευσης σύμφωνα με τη Σύμβαση-STCW 1978, πλοίαρχαι, ύπαρχα και αξιωματικοί που είναι υπεύθυνα φυλακής ναυσιπλοΐας πρέπει να κατανοούν τους παράγοντες που παρεμβαίνουν προκειμένου να ληφθεί απόφαση που βασίζεται στις πληροφορίες που δίνονται από ARPA σε συσχετισμό με άλλαι στοιχεία της ναυσιπλοΐας, έχοντας πλήρως κατανοήσει τις επιχειρησιακές πτυχές και τα σφάλματα συστήματος των μοντέρνων συστημάτων ναυσιπλοΐας. Η εκπαίδευση πρέπει να είναι προοδευτική στη φύση της, ανάλογη των ευθυνών του ατόμου και των πιστοπαιητικών που εκδίνονται από τα Κράτη μέλη σύμφωνα με την Σύμβαση STCW 1978.

#### Θεωρία και Επίδειξη.

#### η θανοί Κίνδυνα από υπέρμετρη εμπιστοσύνη στο ARPA

20 Αξιολόγηση ότι το ARPA είναι απλώς ένα βοήθημα ναυσιπλοΐας και:

- .1 ότι οι περιορισμοί του, περιλαμβανομένων αυτών των αισθητήρων του, καθιστούν την υπέρμετρη εμπιστοσύνη στο ARPA επικίνδυνη, ιδιαίτερα για τη χρησιμοποίηση οπτήρα, και
- .2 η ανάγκη να εφαρμόζονται πάντοτε οι αρχές που πρέπει να τηρούνται κατά τη διάρκεια φυλακής ναυσιπλοΐας και οι Οδηγίες όσον αφορά τη τήρηση φυλακής ναυσιπλοΐας.

#### Βασικοί τύπα συστημάτων ARPA και τα χαρακτηριστικά της οθόνης τους

21 Γνώση των βασικών τύπων συστημάτων ARPA που χρησιμοποιούνται, τα διάφορα χαρακτηριστικά της οθόνης και κατανόηση του πότε πρέπει να χρησιμοποιηθούν οι σταθεροποιημένοι τρόποι σε σχέση με τη ξηρά ή τη θάλασσα και παρουσίαση σε βορρά άνω (north-up), πορεία άνω (course-up) και πλώρη άνω (head-up).

#### Πρότυττα λα τουργίας για το ARPA του ΙΜΟ

22 Εκτίμηση των προτύπων λειτουργίας του ΙΜΟ για το ARPA ιδιαίτερα τα πρότυπα που έχουν σχέση με την ακρίβεια\*.

## Παράγοντες που επιδρούν στην λειτουργία και ακρίβεια του συστήματος

23 Γνώση των παραμέτρων λειτουργίας των αισθητήρων εισόδου του ARPA- εισόδων ραντάρ, πυξίδας και ταχύτητας και επιπτώσεις της δυσλειτουργίας των αισθητήρων στην ακρίβεια των σταχείων του ARPA.

#### 24 Γνώση των:

- .1 επιπτώσεων των περιορισμών διάκρισης της ακριβείας και διόπτευσης στο ραντάρ και των περιορισμών ακριβείας πυξίδας και ταχύτητας σαν σταχείων ασόδου, στην ακρίβεια των σταχείων του ARPA, και
- .2 παραγόντων που επιδρούν στην διανύσματική ακρίβεια.

#### Ικανότητες και περιορισμοί υποτύπωσης πορείας

25 Γνώση των :

<sup>\*</sup> Η σχετική πρότυπη σαρό εκπαίδευσης του ΙΜΟ και η απόφαση MSC.64 (67), όπως τροποπαιήθηκε, μπορεί να βοηθούν στην προεταιμασία των εκπαιδεύσεων.

Δείτε σχετικά/κατάλληλα πρότυπα εκτέλεσης που μοθετήθηκαν από τον Οργανισμό.

- .1 κριτηρίων αυτόματης επιλογής των στόχων,
- .2 παραγόντων που οδηγούν στη σωστή επιλογή των στόχων χειροκίνητα,
- .3 επιπτώσεων στην υποτύπωση πορείας "χαμένων" στόχων και εξασθένιση στόχου, και
- .4 των συνθηκών που προκαλούν «αντιμετάθεση στόχων» και α επιττώσεις του στα απεικονιζόμενα σταχεία.

#### Καθυστερήσεις επεξεργασίας

26 Γνώση των καθυστερήσεων που ενυπάρχουν στην παρουσίαση των επεξεργασθεισών πληροφοριών ΑRPA ιδιαίτερα στην κτήση και επανάκτηση στόχου ή όταν ένας στόχος εκτελεί ελιγμούς.

#### Επιχερησιακές προειδοπαιήσεις, τα οφέλη τους και αι περιορισμοί τους

27 Αξιολόγηση των χρήσεων, οφελών και περιορισμών των επιχειρησιακών προειδοπαιήσεων του ARPA και η σωστή τους ρύθμιση, όπου είναι εφαρμόσιμο, για να αποφευχθούν τυχαίες παρεμβολές.

#### Δοκ μές λα τουργίας συστήματος

#### 28 Γνώση των:

- .1 μεθόδων δοκιμών για δυσλειτουργίες των συστημάτων ARPA περιλαμβανομένων των λειτουργικών αυτοελέγχων, και
- .2 προληπικών μέτρων που πρέπει να λαμβάνονται όταν παρατηρηθεί δυσλειτουργία

## Χειροκίνητη και αυτόματη κτήση στόχων και αι αντίστα χαι περιορισμοί τους

29 Γνώση των ορίων που τίθενται και από τους δύο τύπους κτήσης σε σενάρια πολλαπλών στόχων, και α επιπτώσεις κτήσης στόχου που εξασθενίζει και αντιμετάθεση στόχων.

#### Αληθή και σχετικά διανύσματα και τυτιική γραφική αναπαράσταση πληροφοριών στόχου και επικίνδυνες περιοχές

- 30 Λεπτομερής γνώση των πραγματικών και σχετικών διανυσμάτων, παραγωγή της πραγματικής πορείας και ταχύτητας των στόχων περιλαμβανομένων των:
  - .1 Αξιολόγησης απειλής, εκτίμησης του προβλεπόμενου σημείου εγγύτερης προσέγγισης και προβλεπόμενου χρόνου για το εγγύτερο σημείο προσέγγισης με ευθεία διανυσματική παρέκταση; χρήση γραφικών απεικονίσεων των επικίνδυνων περιοχών,
  - .2 Επιπτώσεων αλλαγής πορείας και/ή ταχύτητας του ιδίου πλοίου και/ή στόχων στο προβλεπόμενο σημείο εγγύτερης προσέγγισης και προβλεπόμενος χρόνος έως το σημείο εγγύτερης προσέγγισης και επικίνδυνες περιοχές,
  - .3 Των επιπτώσεων λανθασμένων διανυσμάτων και επικίνδυνων περιοχών, και
  - .4 Του οφέλους εναλλαγής μεταξύ αληθών και σχετικών διανυσμάτων.

#### Γίληροφορίες για την προγενέστερη θέση των στόχων που υποτυπώνοντα

31 Γνώση της παραγωγής προγενεστέρων στιγμάτων στόχων που υποτυπούντα, αναγνώριση ιστορικών σταχείων ως μέσο ένδειξης προσφάτων ελλιγμών των στόχων και ως μέθοδος ελέγχου της αξιοπιστίας υποτύπωσης του ARPA.

#### Πρακτική

#### Ρυθμίσεις και τήρηση οθόνης

32 Ικανότητα επίδαξης:

- .1 της σωστής διαδικασίας εκκίνησης για επίτευξη άριστης παρουσίασης των πληροφοριών ARPA,
- .2 της επιλογής παρουσίασης πληροφοριών, παρουσίασης σταθεροπαιημένης σχετικής κίνησης και αληθούς κίνησης,
- .3 της σωστής ρύθμισης των ρυθμιστικών κομβίων ελέγχου της οθόνης ραντάρ για άριστη παρουσίαση των σταχείων,
- .4 της επιλογής, ανάλογα με τη περίπτωση, της απαιτούμενης εισόδου ταχύτητας στο ΑΡΡΑ,
- .5 της επιλογής των κομβίων ελέγχου υποτύπωσης του ARPA, χειροκίνητης/αυτόματου κτήσης στόχου, παρουσίαση στοιχείων διανυσματικά/γραφικά,
- .6 της επιλογής της κλίμακας χρόνου των διανυσμάτων / γραφικών παραστάσεων,
- .7 της χρήσης των εξαιρουμένων περιοχών όταν χρησιμοποιείται από το ARPA αυτόματη κτήση στόχων, και
- .8 ελέγχων λειτουργίας του ραντάρ, πυξίδας, εισόδου ταχύτητας και ARPA.

## Δοκ μές λειτουργίας του συστήματος

33 Ικανότητες εκτέλεσης ελέγχων του συστήματος και προσάορσμού της ακρίβειας των σταιχείων του ARPA, περιλαμβανομένης της εγκαταστάσης δοκιμής ελιγμών ελέγχοντας το βασικό ίχνος του ραντάρ.

## Λήψη πληροφορ ών από την οθόνη του ARPA

- 34 Επίδειξη της ικανότητας λήψης πληροφοριών τόσο σε σχετικό όσο και σε αληθή τρόπο κίνησης της οθόνης περιλαμβανομένων:
  - .1 του εντοπισμού των κρίσιμων ηχών,
  - .2 της ταχύτητας και πορείας της σχετικής κίνησης του στόχου,
  - .3 του χρόνου και της προβλεπόμενης απόστασης για άφιξη του στόχου στο πλησιέστερο σημείο προσέγγισης,
  - .4 των πορειών και ταχυτήτων των στόχων,
  - .5 ανίχνευσης αλλαγών πορείας και ταχύτητος των στόχων και των περιορισμών τέταιας φύσης πληροφοριών,
  - .6 της επίπτω<u>ση</u>ς των αλλα<u>γ</u>ών πορ<u>είας του ιδίου πλοίου ή της ταχύτητος ή και των δύο, και</u>
  - .7 της λειτουργίας του συστήματος δοκιμής ελιγμών.

# Εφαρμογή των Διεθνών Κανονισμών Πρόληψης Συγκρούσεων στην Θάλασσα, 1972, όπως τροποπα ήθηκε

35 Ανάλυση των επικείμενων καταστάσεων σύγκρουσης από τις πληροφορίες που παρατίθενται, προσδιορισμό και εκτέλεση των ενεργειών για να αποφευχθούν καταστάσεις συμφόρησης σύμφωνα με τους Διεθνείς Κανονισμούς Πρόληψης Συγκρούσεων στη Θάλασσα, 1972, όπως τροποποιήθηκε, σε ισχύ.

## ΕΚΠΑΙΔΕΎΣΗ ΚΑΙ ΑΞΙΟΛΟΓΉΣΗ ΣΤΗΝ ΕΠΙΧΕΙΡΗΣΙΑΚΉ ΧΡΉΣΗ ΗΛΕΚΤΡΟΝΙΚΏΝ ΣΥΣΤΗΜΑΤΏΝ ΠΑ-ΡΟΥΣΙΑΣΉΣ ΧΑΡΤΉ ΚΑΙ ΠΛΗΡΟΦΟΡΙΏΝ (ECDIS)

#### 🖹 σαγωγή

- 36 Όταν χρησιμοπαιούνται εξομαιωτές για εκπαίδευση και αξιολόγηση στην επιχειρησιακή χρήση Ηλεκτρονικών συστημάτων Παρουσίασης Χαρτών και Πληροφοριών (ECDIS), οι ακόλουθες προσωρινές οδηγίες πρέπει να εξετασθούν σε όποια τέταια εκπαίδευση και αξιολόγηση.
- 37 Εκπαίδευση και αξιολόγηση στην επιχειρησιακή χρήση του ECDIS πρέπει :

- .1 να ενσωματώνει την χρήση εξοπλισμού προσομοίωσης ECDIS, και
- .2 να συμμορφώνεται στα πρότυπα που δεν είναι κατώτερα από εκείνα που δίνονται στις παραγράφους 38 έως 65 παρακάτω.
- 38 Ο εξοπλισμός προσομοίωσης ECDIS πρέπει, επιπροσθέτως σε όλα τα πρότυπα εκτέλεσης που εφαρμόζονται στην συνάντηση και παρατίθενται στο τμήμα Α-Ι/12 του Κώδικα STCW, όπως τροποποιήθηκε, να μπορούν να προσομαώνουν εξοπλισμό ναυσιπλοΐας και τους επιχειρησιακούς ελέγχους γέφυρας που πληρούν όλα τα εφαρμόσιμα πρότυπα που υιοθετήθηκαν από τον Οργανισμό, να ενσωματώνουν εγκαταστάσεις για να ενεργοποιούν βυθομετρήσεις και:
  - .1 να δημιουργούν ένα περιβάλλον επιχείρησης σε πραγματικό χρόνο, περιλαμβάνοντας έλεγχο ναυσιπλοΐας και όργανα επικαινωνίας και κατάλληλο έξοπλισμό για καθήκοντα ναυσιπλοΐας και τήρησης φυλακής και προσόντα πραγματοποίησης ελιγμών να αξιολογούνται, και
  - .2 ρεαλιστικά χαρακτηριστικά προσομοίωσης του «ίδιου πλοίου» σε καταστάσεις αναιχτής θάλασσας, καθώς επίσης και επιδράσεις καιρικών συνθηκών, παλίρρατας και ρευμάτων.

39 Επιδείξεις, και πρακτική, της χρήσης ECDIS πρέπει να διεξάγονται, όταν είναι απαραίτητο, με την χρήση εξομαωτών. Εκπαιδευτικές ασκήσεις πρέπει να πραγματοπαούνται σε πραγματικό χρόνο, με σκοπό την αύξηση της γνώσης των εκπαιδευόμενων σχετικά με τους κινδύνους ακατάλληλης χρήσης του ECDIS. Επιταχυνόμενο πρόγραμμα μπορεί να χρησιμοπαιείται μόνο για επιδείξεις.

#### Γενικά

#### Στόχα εκπα δευτικού προγράμματος ECDIS

40 Ο εκπαιδευόμενος ECDIS πρέπει να μπορεί να:

- .1 χειρίζεται εξοπλισμό ECDIS, χρησιμοποιεί τις λειτουργίες ναυσιπλοΐας του ECDIS, επιλέγει και αξιολογεί όλες τις σχετικές πληροφορίες και δρα κατάλληλα σε περίπτωση δυσλειτουργίας,
- .2 δηλώνει τα πιθανά λάθη των δεδομένων που παρουσιάζονται και τα συνήθη λάθη μετάφρασης, και
- .3 εξηγεί γιατί το ECDIS δεν πρέπει να βασίζεται σε αυτό ως το μόνο αξιόπιστο βοήθημα ναυσιπλοίτας.

#### Θεωρία και επίδε ξη

- 41 Όπως η ασφαλής χρήση του ECDIS απαιτεί γνώση και κατανόηση των βασικών αρχών που διέπουν τα δεδομένα ένα ECDIS και τους κανόνες παρουσίασής τους καθώς επίσης και πιθανά λάθη στα παρουσιασμένα δεδομένα και στους σχετικούς με ECDIS περιορισμούς και πιθανούς κινδύνους, πρέπει να παρέχονται ένας αριθμός ομιλιών που να καλύπτουν τη θεωρητική εξήγηση. Όσο είναι δυνατό, τέτα α μαθήματα πρέπει να παρέχονται μέσα σε ακείο πλαίσιο και να γίνεται χρήση πρακτικών παραδειγμάτων. Πρέπει να ενισχύονται κατά τη διάρκεια ασκήσεων προσομοίωσης.
- 42 Για ασφαλή χειρισμό εξοπλισμού ECDIS και σχετικών πληροφοριών ECDIS (χρήση λειτουργιών ναυσπλοΐας του ECDIS, επιλογή και αξιολόγηση όλων των σχετικών πληροφοριών για να εξακειωθούν με τα στοιχεία της ανθρώπινης μηχανής ECDIS), πρακτικές ασκήσεις και εκπαίδευση στους εξομαιωτές ECDIS πρέπει να αποτελούν το βασικό περιεχόμενο της εκπαίδευτικής σειράς.
- 43 Για τον καθορισμό των εκπαιδευτικών σκοπών, μια δομή δραστηριοτήτων πρέπει να καθορίζεται, Λεπτομερής προσδιορισμός των σκοπών εκμάθησης πρέπει να αναπτύσσονται για κάθε θέμα αυτής της δομής.

#### Ασκήσεις προσομοίωσης

44 Ασκήσεις πρέπει να πραγματοποιούνται σε ατομικούς εξομοιωτές ECDIS, ή σε εξομοιωτές ναυσιπλοΐας πλήρους αποστολής συμπεριλαμβανομένου του ECDIS, για να καθιστά ικανούς τους εκπαιδευόμενους να αποκτήσουν τις απαραίτητες πρακτικές δεβότητες. Για ασκήσεις ναυσιπλοΐας πραγματικού χρόνου, συνστάται α εξομοιωτές ναυσιπλοΐας να καλύπτουν την σύνθετη κατάσταση ναυσιπλοΐας. Οι ασκήσεις πρέπει να παρέχουν εκπαίδευση στην χρήση διάφορων κλιμάκων, τρόπων ναυσιπλοΐας και τρόπων παρουσίασης που διατίθενται, έτσι ώστε οι εκπαιδευόμενοι να μπορούν να χρησιμοποιήσουν τον εξοπλισμό στην ιδιαίτερη κατάσταση.

45 Η επιλογή ασκήσεων και σεναρίων διέπεται από τις διαθέσιμες εγκαταστάσεις εξομαωτή. Εάν ένας ή περισσότερα σταθμοί εργασίας ECDIS καθώς και ένας προσομαιωτής πολυάριθμων αποστολών διατίθενται, α σταθμοί μπορεί αρχικά να χρησιμοπαιούνται για βασικές ασκήσεις με την χρήση εγκαταστάσεων ECDIS και για ασκήσεις σχεδιασμού περάσματος, εφόσον α προσομαιωτές πολυάριθμων αποστολών μπορεί αρχικά να χρησιμοπαιηθούν για ασκήσεις που έχουν σχέση με τις λειτουργίες παρακολούθησης περάσματος σε πραγματικό χρόνο, όσο ρεαλιστικό είναι δυνατό σε σχέση με τον πραγματικό φόρτο εργασίας μιας τήρησης φυλακής ναυσιπλοίας. Ο βαθμός πολυπλοκότητας των ασκήσεων πρέπει να αυξάνεται μέσω του προγράμματος εκπαίδευσης έως ο εκπαιδευόμενος έχει συγκεντρώσει όλες τις πλευρές του θέματος που μαθαίνει.

46 Οι ασκήσεις πρέπει να είναι όσο γίνεται ρεαλιστικές. Για να επιτευχθεί αυτό , τα σενάρια πρέπει να εντοπίζονται σε φανταστικές θαλάσσιες περιοχές, Καταστάσεις, λειτουργίες και ενέργειες για διάφορους μαθησιακούς σκοπούς που συμβαίνουν σε διαφορετικές θαλάσιες περιοχές μπορούν να ενσωματωθούν σε μια άσκηση και σε πραγματικό χρόνο.

47 Ο κύριος αντικειμενικός σκοπός των ασκήσεων εξομοίωσης είναι να διασφαλίζει ότι οι εκπαιδευόμενοι κατανοούν τις ευθύνες τους στην επιχειρησιακή χρήση του ECDIS σε όλες τις απόψεις σχετικές με την ασφάλεια και είναι διεξοδικά εξοικειωμένοι με το σύστημα και τον εξοπλισμό που χρησιμοποιείται.

## Βασικοί τύποι των συστημάτων ECDIS και χαρακτηριστικά παρουσίασής τους.

48 Ο εκπαιδευόμενος πρέπει να αποκτά γνώση των βασικών τύπων ECDIS που χρησιμοπαιούνται, τα διάφορα χαρακτηριστικά παρουσίασης, δομής δεδομένων και κατανόησης των:

1 διαφορών ανάμεσα στην ακτίνα και στους χάρτες οριζόντιων γραμμών,

- .2 διαφορών ανάμεσα άμεσα ECDIS και ECS,
- .3 διαφορών ανάμεσα ECDIS και RCDS\*,
- .4 χαρακτηριστικών του ECDIS και διάφορες λύσεις τους, και
- .5 χαρακτηριστικών συστημάτων για ειδικούς σκοπούς (συνήθεις σταθμοί/ έκτακτες ανάγκες).

## Κίνδυνα υπερεξάρτησης στο ECDIS

49 Η εκπαίδευση στην επιχειρησιακή χρήση του ECDIS πρέπει να ασχολείται με :

- .1 τους περιορισμούς του ύς του ECDIS ως εργαλείο ναυσιπλοΐας,
- .2 τους πιθανούς κινδύνους μη σωστής λειτουργίας του συστήματος,
- .3 τους περιορισμούς του συστήματος, περιλαμβανομένους εκείνους των αισθητήρων του,
- .4 ανακρίβεια υδρογραφικών δεδομένων, των περιορισμών ακτίνας και ηλεκτρονικών χαρτών οριζόντιων γραμμών (ECDIS κατά RCDS και ENC κατά RNC), και
- .5 πιθανός κίνδυμος ανθρώπινων λαθών.

Πρέπει να δίνεται έμφαση στην ανάγκη κατάλληλης τήρησης φυλακής και εκτέλεσης περιοδικού ελέγχου ιδιαίτερα του στίγματος του πλοίου, με ανεξάρτητες μεθόδους ECDIS.

## Ανίχνευση λανθασμένης μετάφρασης πληροφοριών

50 Γνώση των περιορισμών εξοπλισμού και ανίχνευση λανθασμένης ερμηνείας πληροφοριών είναι βασική για την ασφαλή χρήση του ήση του ECDIS. Οι ακόλουθαι παράγοντες πρέπει να τονίζονται κατά τη διάρκεια της εκπαίδευσης:

- .1 πρότυπα εκτέλεσης εξοπλισμού,
- .2 παρουσίαση δεδομένων ραντάρ σε ηλεκτρονικούς χάρτες, περιορισμός αντιφάσεων ανάμεσα στην εικόνα του ραντάρ και στον ηλεκτρονικό χάρτη,

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- .3 πιθανή προβολή αντιφάσεων ανάμεσα στους ηλεκτρονικούς και δια χειρός χάρτες,
- .4 πιθανές αντιφάσεις διαβάθμισης (υπερσκελισμός και υποσκελισμός) κατά την παρουσίαση ηλεκτρονικού χάρτη και της αρχικής διαβάθμισης του,
- .5 επιπτώσεις της χρήσης διαφορετικών συστημάτων αναφοράς για τον ορισμό στίγματος,
- .6 επιπτώσεις της χρήσης διαφορετικών οριζόντιων και κάθετων δεδομένων απόδοσης μηχανής,
- .7 επιπτώσεις της κίνησης του πλοίου σε θαλάσσια δίοδο,
- .8 περιορισμοί ECDIS στον τρόπο παρουσίασης χάρτη οριζόντιων γραμμών,
- .9 πθανά λάθη στην παρουσίαση:
  - .9.1 του στίγματος του πλοίου,
  - .9.2 δεδομένα ραντάρ και πληροφορίες ARPA και AIS,
  - .9.3 διαφορετικά γεωδατικά συστήματα συντονισμού, και
- .10 πιστοποίηση των αποτελεσμάτων της δια χειρός ή αυτόματης επιδιόρθωσης δεδομένων
  - .10.1 σύγκριση δεδομένων χάρτη και εικόνας ραντάρ, και
  - .10.2 έλεγχος στίγματος του πλοίου χρησιμοπαώντας άλλα ανεξάρτητα συστήματα ορισμού στίγματος.
- 51 Η Λανθασμένη ερμηνεία των δεδομένων και κατάλληλα μέτρα που λαμβάνονται για την αποφυγή λαθών ερμηνείας πρέπει να εξηγείται. Πρέπει να δίνεται ιδιαίτερη έμφαση στις συνέπεις των ακόλουθων:
  - .1 αγνόηση του υπερσκελισμού της παρουσίασης,
  - .2 μη κρτική αποδοχή του στίγματος,
  - .3 σύγχιση τρόπου παρουσίασης,
  - .4 σύγχιση διαβάθμισης χάρτη,
  - .5 σύγχιση συστημάτων αναφοράς,
  - ,6 διάφορα τρόποι παρουσίασης,
  - .7 διάφορα τρόπα σταθεροποίησης ακτίνας,
  - .8 διαφορές ανάμεσα στον πραγματικό βορρά και στον γύρο βορρά (ραντάρ),
  - .9 χρήση του ίδιου συστήματος αναφοράς δεδομένων,
  - .10 χρήση της κατάλληλης διαβάθμθσης χάρτη,
  - .11 χρήση του καλύτερου προσαρμοσμένου αισθητήρα στη δοθείσα θέση και περιπτώσεις.
  - .12 είσοδος διορθωμένων αξιών δεδομένων ασφάλειας,
    - .12.1 περίμετρος ασφάλειας πλοίου
    - .12.2 ασφάλειας (ασφαλή ύδατα), και
    - ,12.3 γεγονότα, και
  - .13 κατάλληλη χρήση όλων των ἄιαθέσιμων δεδομένων.

52 Εκτίμηση ότι το RCDS είναι το μόνο βοήθημα ναυσιπλοΐας και ότι, όταν λειτουργεί σε τρόπο RCDS, ο ECDIS εξοπλισμός πρέπει να χρησιμοπαιείται μαζί με το κατάλληλο χαρτοφύλακα ενημερωμένων χαρτών:

- .1 εκτίμηση διαφορών στην χρήση RCDS όπως περιγράφεται στο SN.1 /Circ.207/Rev.1 «Διαφορές ανάμεσα στο RCDS και ECDIS», και
- .2 ECDIS, σε οπαιοδήποτε τρόπο, πρέπει να χρησιμοπαιείται στην εκπαίδευση με κατάλληλο χαρτοφύλακα ενημερωμένων χαρτών.

## Παράγοντες που επηρεάζουν το σύστημα εκτέλεσης και ακρίβα ας

53 Μία σταχειώδη κατανόηση των αρχών του ECDIS πρέπει να επιτυγχάνεται, καθώς και πλήρη πρακτική γνώση:

- .1 έναρξης και θέσπισης ECDIS, αισθητήρες δεδομένων σύνδεσης, αποδέκτες συστημάτων δορυφορκής και ραδιοναυσπλοΐας, ραντάρ, γυροπυξίδα, δρομόμετρο, ηχηπκός βυθομετρητής, ακρίβεια και περιορισμοί αυτών των αισθητήρων, περιλαμβανομένων επιπτώσεων των λαθών υπολογισμού και της ακρίβειας στίγματος πλοίου, χειρισμοί ακρίβειας του δείκτη εκτέλεσης πορείας, λάθος πυξίδας στην ακρίβεια ένδειξης εκτέλεσης πορείας, ρηχά ύδατα σχεπκά με την ακρίβεια της λειτουργίας δρομομέτρου, διόρθωση δρομομέτρου σχεπκά με την ακρίβεια υπολογισμού ταχύτητας, παρεμβολή (κατάσταση θάλασσας) στην ακρίβεια της λειτουργίας του ηχηπκού βυθομετρητή, και
- .2 τα υφιστάμενα πρότυπα λειτουργίας για παρουσίαση ηλεκτρονικού χάρτη και συστήματα πληροφορών που υιοθετήθηκαν από τον Οργανισμό.

#### Πρακτική

### Ρυθμίσες και τήρηση παρουσίασης

54 Γνώση και κατάρτιση πρέπει να αποκτάται για :

- .1 την σωστή διαδικασία έναρξης για την απόκτηση άριστης παρουσίασης πληροφοριών ECDIS,
- .2 την επιλογή τρόπου παρουσίασης (πρότυπα παρουσίασης, βάση παρουσίασης, όλες α άλλες πληροφορίες που παρουσιάζονται ατομικά μετά από άτημα),
- .3 σωστή προσαρμογή όλων των ποκίλλων ελέγχων παρουσίασης ραντάρ /ARPA για άριστη παρουσίαση δεδομένων,
- .4 επιλογή εύκολης διαμόρφωσης,
- .5 επιλογή, όπως ταιριάζει, εισαγωγής απαιτούμενης ταχύτητας στο ECDIS,
- .6 επιλογή χρονικού φάσματος διανυσμάτων, και
- .7 έλεγχα εκτέλεσης στίγματος ραντάρ / ARPA, πυξίδα, αισθητήρες δεδομένων ταχύτητας και ECDIS.

## Επιχειρησιακή χρήση ηλεκτρονικών χαρτών

55 Γνώση και δεβοτεχνίες πρέπει να αποκτώνται όσον αφορά:

- .1 τα κύρια χαρακτηριστικά παρουσίασης δεδομένων ECDIS και την επιλογή κατάλληλων πληροφοριών για καθήκοντα ναυσπλοΐας,
- .2 τις αυτόματες λειτουργίες που απαιτούνται για την παρακολούθηση της ασφάλειας του πλοίου, όπως παρουσίαση στίγματος, κατεύθυνση/πορεία, ταχύτητα, αξίες ασφάλειας και χρόνος.
- .3 δια χαιρός λαιτουργίες (με δρομέα, ηλεκτρονική γραμμή διόπτευσης, δαχτύλιους περιοχών),
- .4 επιλογή και τροποποίηση περιεχομένου ηλεκτρονικού χάρτη,
- .5 διαβάθμιση (περιλαμβανομένου υπερσκελισμού και υποσκελισμού),

- .6 την εστίαση,
- .7 τοποθέτηση δεδομένων ασφάλειας πλοίου,
- .8 χρήση τρόπου παρουσίασης κατά τη διάρκεια ημέρας ή νύχτας,
- .9 ανάγνωση όλων των συμβόλων και των συντομογραφιών χάρτη,
- .10 χρήση διαφορετικών ειδών δρομέων και ηλεκτρονικών διαγραμμίσεων για απόκτηση δεδομένων νατισιπλοΐας,
- .11 παρακολούθηση μιας περιοχής από όλες τις κατευθύνσεις και επιστροφή στο στίγμα του πλοίου,
- .12 εύρεση απαραίτητης περιοχής, χρησιμοποιώντας γεωγραφικές συντεταγμένες,
- .13 παρουσίαση αναγκαίων στρωμάτων δεδομένων για απόκτηση δεδομένων ναυσιπλοΐας,
- .14 επιλογή κατάλληλων και σαφών δεδομένων (στίγμα, πορεία, ταχύτητα),
- .15 εισαγωγή σημειώσεων ναυτικών,
- .16 χρήση παρουσιάσης βόρειου προσανατολισμού και άλλων ειδών προσανατολισμού, και
- .17 χρήση πραγματικών και σχετικών τρόπων κίνησης

#### Σχεδι ασμός πορείας

- 56 Γνώση και δεξιοτεχνίες πρέπει να αποκτώνται όσον αφορά:
  - .1 την εισαγωγή χαρακτηριστικών πλοίου στο ECDIS,
  - .2 την επιλογή θαλάσσιας περιοχής για τον σχεδιασμό πορείας,
    - .2.1 αναθεώρηση των απαιτούμενων υδάτων για θαλάσσια περάσματα, και
    - .2.2 αλλαγή διαβάθμισης χάρτη,
  - .3 εξακρίβωση ότι κατάλληλα και ενημερωμερωμένα χάρτες είναι διαθέσιμα,
  - .4 σχεδιασμός πορείας με παρουσίαση μέσω ECDIS, χρήση γραφικού συντάκτη, λαμβάνοντας υπόψη λοξοδρομική καμπύλη και πλεύση μέγιστου κύκλου:
    - .4.1 χρήση βάσης δεδομένων ECDIS για απόκτηση δεδομένων ναυσιπλοΐας, υδρομετεωρολογικών και άλλων,
    - .4.2 να λαμβάνουν υπόψη την προσωρινή ακτίνα και περιστροφικές γραμμές / σημεία όταν εκφράζονται σε διαβάθμιση χάρτη,
    - .4.3 χάραξη επικίνδυνων βαθών και περιοχών που εκθέτουν περιβάλλοντα προστασίας βάθους,
    - .4.4 χάραξη διαδρομών με διασταύρωση περιβάλλοντων βαθών και ουσιώδεις παρεκλίσσεις διασταυρώμενων πορεία, προσθέτοντας, αντικαθιστώντας και σβήνοντας διαδρομές,
    - .4.5 λαμβάνοντας υπόψη ασφαλή ταχύτητα,
    - .4.6 έλεγχος προσχεδιασμένης πορείας για ασφάλεια ναυσιπλοΐας, και
    - .4.7 δημιουργία συναγερμών και προειδοποιήσεων,
  - .5 σχεδιασμός πορείας με υπολογισμό στον πίνακα, περιλαμβάνοντας:
    - .5.1 επιλογή σημείων πορείας,

- .5.2 ανάκληση καταλόγου σημείων πορείας,
- .5.3 σημεώσεις σχεδιασμού,
- .5.4 προσαρμογή σε σχεδιασμένη πορεία,
- .5.5 έλεγχος προσχεδιασμένης πορέιας για ασφάλεια ναυσιπλοΐας,
- .5.6 σχεδιασμός εναλλακτικής πορείας,
- .5.7 αποθήκευση σχεδιασμένων πορειών, φορτωση και εκφόρτωση ή διαγραφή διαδρομών,
- .5.8 δημιοουργία γραφικού αντιγράφου οθόνης και εκτύπωση πορέιας,
- .5.9 έκδοση κα τροποποίηση σχεδιασμένης πορείας,
- .5.10 καθορισμός αξιών ασφάλειας σύμφωνα με το μέγεθος και τις παραμέτρους χειρισμού του πλοίου,
- .5.11 σχεδιασμός πορέιας επιστροφής, και
- .5.12 σύνδεση αρκετών πορειών

#### Παρακολούθηση πορείας

57 Γνώση και δεβοτεχνίες πρέπει να αποκτώνται όσον αφορά:

- .1 την χρήση ανεξάρτητων δεδομένων ελέγου στίγματος πλοίου ή την χρήση εναλλακτικών συστημάτων στα πλαίσια του ίσια του ECDIS
- .2 χρήση εμπρόσθιας λειτουργίας (look ahead):
  - .2.1 αλλαγή χαρτών και άλλων διαβαθμίσεων,
  - .2.2 αναθεώρηση χαρτών ναυσιπλοΐας,
  - .2.3 επιλογή ακτίνας χρόνου,
  - .2.4 πρόβλεψη στίγματος πλοίου για κάπαιο χρονικό μεσοδιάστημα,
  - .2.5 αλλαγή προσχεδιασμένης πορείας (τροποποίηση πορείας),
  - .2.6 εισαγωγή ανεξάρτητων δεδομένων για τον υπολογισμό αλλαγής ρευμάτων ανέμου και ανοχής ρευμάτων,
  - .2.7 σωστή αντίδραση σε συναγερμό,
  - .2.8 εισαγωγή διορθώσεων για ανπφάσεις γεωδαιτικόύ δεδομένου,
  - .2.9 παρουσίαση χρονικών επισημάνσεων στην πορεία του πλοίου,
  - .2.10 εσαγωγή δια χειρός στίγματος πλοίου, και
  - .2.11 συντεταγμένες υπολογισμού, πορείας, διοπτεύσεις και αποστάσεις σε χάρτη

## Χα α αμός συναγερμού

58 Γνώση και ικανότητα ερμήνειας και σωστής αντίδρασης σε όλα τα είδη συστημάτων, όπως αισθητήρες ναυσιπλοΐας, δείκτες δεδομένα και συναγερμοί χαρτών και δείκτες προειδοπαιήσεων, περιλαμβανομένου συστήματος σηματοδότησης αλλαγής ηχητικού και οπτικού συναγερμού, πρέπει να αποκτάται σε περίπτωση:

.1 απουσίας επόμενου χάρτη στη βάση δεδομένων του ECDIS,

- .2 διασταύρωση περιβάλλοντος ασφάλειας,
- .3 υπέρβαση ορίων διασταυρούμενης πορείας,
- .4 παρέκκλιση από την σχεδιασμένη πορεία,
- .5 προσέγγιση σημείου διαδρομής,
- .6 προσέγγιση σημαντικού σημείου,
- .7 διαφορά ανάμεσα στον υπολογισμένο και πραγματικό χρόνο άφιξης στο σημείο,
- .8 πληροφορίες σχετικά με τον υπερσκελισμό και του υποσκελισμό,
- .9 προσέγγιση απομονωμένου κινδύνου ή περιοχής κινδύνου,
- .10 διάσχιση συγκεκριμένης περιοχής,
- .11 επιλογή ενός διαφορετικού γεωδαιτικού δεδομένου,
- .12 προσέγγιση άλλων πλοίων,
- .13 λήξη φυλακής,
- .14 αλλαγή χρονοδιακότττη,
- .15 αποτυχία δοκμής συστήματος,
- .16 δυσλειτουργία συστήματος καθορισμού στίγματος που χρησιμαπαείται στο ECDIS,
- .17 αποτυχία υπολογισμού στίγματος κατ΄ εκτίμηση, και
- .18 ανικανότητα καθορισμού στίγματος με την χρήση συστήματος ναυσιπλοΐας.

#### Δι όρθωση διά χειρός του στίγματος του πλοίου και των παραμέτρων κίνησης

- 59 Γνώση και δεβοτεχνίες πρέπει να αποκτώνται όσον αφορά τη διόρθωση δια χειρός:
  - .1 του στίγματος του πλοίου σε θέση υπολογισμού στίγματος κατ΄εκτίμηση, όταν ο αποδέκτης του δορυφορικού και ραδιεπικονωνιακού συστήματος είναι κλειστός,
  - .2 του στίγματος του πλοίου, όταν οι αυτόματα αποκτειθήσες συντεταγμένες είναι ανακριβείς, και
  - .3 πορείας και τιμές ταχύτητας.

#### Καταχωρήσεις στο ημερολόγιο πλοίου

- 60 Γνώση και δεβοτεχνίες πρέπει να αποκτώνται όσον αφορά;
  - .1 αυτόματη καταγραφή πλου,
  - .2 αναπαράσταση προηγόυμενης πορείας, λαμβάνοντας υπόψη:
    - .2.1 μέσα καταγραφής,
    - .2.2 ενδιάμεσες καταγραφές,
    - .2.3 πστοποίηση βάσης δεδομένων που χρησιμοποιείται,
  - .3 παρακολούθηση αρχείων στο ηλεκτρονικό ημερολόγιο πλοίου,
  - .4 άμεση καταχώρηση στο ηλεκτρονικό ημερολόγιο του πλοίου,

- .5 αλλαγή ώρας πλοίου,
- .6 εισαγωγή επιπρόσθετων δεδομένων,
- .7 εκτύπωση του περιεχομένου του ηλεκτρονικού ημερολογίου του πλοίου,
- .8 θέση σε λειτουργία των αυτόματων χρονικών διαστημάτων καταγραφής,
- .9 σύνθεση δεδομένων πλου και αναφοράς, και
- .10 διασύνδεση με ον αντιγραφέα δεδομένων πλου (VDR).

#### Ενημέρωση χαρτών

- 61 Γνώση και δεξιοτεχνίες πρέπει να αποκτώνται όσον αφορά:
  - .1 την δια χειρός ενημέρωση των ηλεκτρονικών χαρτών. Ιδιαίτερη προσοχή πρέπει να δίνεται στη συμμορφία ελλειψοειδής αναφοράς και στην συμμόρφωση με τις μονάδες υπολογισμού που χρησιμοπαιούνται σε χάρτη και στο κείμενο διόρθωσης.
  - .2 εκτέλεση ημιαυτόματης ενημέρωσης ηλεκτρονικών χαρτών, χρησιμοπαιώντας τα δεδομένα που αποκτήθηκαν με ηλεκτρονικά μέσα σε ηλεκτρονικό χάρτη, και
  - .3 εκτέλεση αυτόματης ενημέρωσης ηλεκτρονικών χαρτών, χρησιμοπαώντας ενημερωμένους φακέλους που αποκτήθηκαν μέσω γραμμών επικανωνίας ηλεκτρονικών δεδομένων.

Στα σενάρια όπου χρησιμοπαιούνται μη ενημερωμένα δεδομένα για να δημιουργηθεί μία κρίσιμη κατάσταση οι εκπαιδευόμενοι θα απαιτείται να παρουσιάζουν ad hoc ενημέρωση του χάρτη.

#### Επιχαρησιακή χρήση ECDIS όπου συνδέεται ραντάρ/ ARPA

- 62 Γνώση και δεξιοτεχνίες πρέπει να αποκτώνται όσον αφορά:
  - .1 την σύνδεση ARPA στο ECDIS,
  - .2 την ένδειξη ακτίνων ταχύτητας στόχου,
  - .3 την ένδειξη πορείας στόχου,
  - .4 αρχειοθέτηση πορείας στόχου,
  - .5 παρακολούθηση πίνακα στόχων,
  - .6 τον έλεγχο ευθυγράμμισης επικάλυψης ραντάρ με τα χαρτογραφημένα γεωγραφικά χαρακτηριστικά,
  - .7 την εξομοίωση ενός ή περισσοτέρων ελιγμών,
  - .8 διορθώσεις στίγματος πλοίου, χρησιμοποιώντας σημείο αναφοράς που υποτυπώνεται από το ARPA, και
  - .9 διορθώσεις χρησιμοπαιώντας τον δρομέα και την ηλεκτρονική μπάρα του ARPA.

Δείτε επίσης το τμήμα Β-Ι/12, Οδηγία που αφορά την χρήση προσομαωτών (αφορά ραντάρ/ ARPA), ιδιαίτερα πις παραγράφους 17 έως 19 και 36 έως 38.

#### Επίχα ρησιακή χρήση ECDIS όπου συνδέεται AIS

- 63 Γνώση και δεβότητες αποκτώνται όσον αφορά:
  - .1 τη διασύνδεση με AIS,
  - .2 την ερμηνεία δεδομένων AIS,

- .3 ένδειξη ακτίνας ταχύτητας στόχου,
- .4 ένδειξη πορέιας στόχου, και
- .5 αρχειοθέτηση πορείας στόχου

#### Επιχειρησιακές προειδοπαιήσεις, τα οφέλη τους και αι περιορισμοί τους

64 Οι εκπαιδευόμενα πρέπει να μπορούν να αξιολογούν τις χρήσεις, τα οφέλη και τους περιορισμούς των επιχειρησιακών προειδοπαιήσεων του ECDIS και της ορθής διάταξης, όπου εφαρμόζεται, προς αποφυγή πλαστής παρέμβασης.

#### Σύστημα επιχειρησιακών δοκιμών

65 Γνώση και δεξιότητες πρέττει να αποκτώνται όσον αφορά:

- .1 τις μεθόδους δοκιμής δυσλειτουργιών του ECDIS, περιλαμβάνοντας λειτουργική αυτοδοκιμή,
- .2 λήψη προφυλακτικών μέτρων όταν υπάρχει δυσλειτουργία, και
- .3 επαρκείς ρυθμίσεις υποστήριξης (ανάληψη και πλοήγηση με την χρήση συστήματος υποστήριξης).

#### Άσκηση αναφοράς

66 Ο εκπαιδευτής πρέπει να αναλύει τα αποτελέσματα όλων των ασκήσεων που ολοκληρώνονται από όλους τους εκπαιδευόμενους και να τις τυπώνει. Ο χρόνος που δαπανάται στην αναφορά πρέπει να καταλαμβάνει το 10% και 15% του συνολικού χρόνου ασκήσεων προσομείωσης.

## Συνι στώμενα πρότυπα λει τουργίας για μή υποχρεωτικούς τύπους προσομοίωσης

67 Τα πρότυπα λειτουργίας μη υποχρεωτικού εξοπλισμού προσομοίωσης που χρησιμοποιείται για εκπαίδευση και/ή αξιολόγηση της ικανότητας ή επίδειξης δεξιοτήτων καθορίζονται παρακάτω. Τέταιου είδους προσομοίωση περιλαμβάνει αλλά δεν περιορίζεται, στους παρακάτω τύπους:

- .1 ναυσιπλοΐα και τήρηση φυλακής,
- .2 χειρισμός πλοίου και ελιγμοί,
- .3 χειρισμός φορτίου και στο βασία,
- .4 ραδιοεπικοινωνίες και αναφορά, και
- .5 λειτουργία κύριων και βοηθητικών μηχανημάτων

#### Προσομοίωση ναυσιπλοΐας και τήρησης φυλακής

68 Ο εξοπλισμός προσομοίωσης ναυσιπλοΐας και τήρησης φυλακής θα πρέπει εκτός του ότι πρέπει να ανταποκρίνεται σε όλες τις ισχύουσες απαιτήσεις που καθορίζονται στο τμήμα Α-Ι/2, να είναι σε θέση να προσομαώνει εξοπλισμό ναυσιπλοΐας και τις επιχειρησιακές διατάξεις ελέγχου της γέφυρας που ανταποκρίνονται σε όλα τα ισχύοντα πρότυπα λειτουργίας που έχουν γίνει αποδεκτά από τον Οργανισμό\*, να διαθέτει σύστημα παραγωγής ηχοβόλησης και:

- .1 να δημιουργεί επιχειρησιακό περιβάλλον πραγματικού χρόνου, περιλαμβάνοντας διατάξεις ελέγχου ναυσιπλοΐας και όργανα και συσκευές επικοινωνιών που χρησιμοποιούνται για τη ναυσιπλοΐα και τα καθήκοντα που πρέπει να εκτελούνται κατά την τήρηση φυλακής και των δεβοτήτων ελιγμών που πρόκειται να αβολογηθούν,
- .2 παροχή ρεαλιστικού οπτικού σεναρίου ημέρας ή νύχτας, περιλαμβανομένης μεταβαλλόμενης ορατότητας ή κατά τη νύχτα μόνο όπως φαίνονται από τη γέφυρα, με ένα ελάχιστο οριζόντιο οπτικό πεδίο διαθέσιμο στον εκπαιδευόμενο που καλύπτει τους οπτικούς τομείς που απαιτούνται για τις εργασίες ναυσπλοΐας και τους αντικειμενικούς σκοπούς τήρησης φυλακής.

Βλέπε σχετικά/ κατάλληλα ττρότυπα εκτέλεσης που Φοθετήθηκαν από τον Οργανισμό.

- .3 ρεαλιστική προσομοίωση της δυναμικής συμπεριφοράς του ιδίου πλοίου σε συνθήκες ανακτής θάλασσας περιλαμβανομένων των επιπτώσεων του καιρού, παλλοίριας, ρευμάτων και αλληλεπίδρασης με άλλα πλοία, και
- .4 ρεαλιστικές διαδικασίες προσομοίωσης επικαινωνίας VTS ανάμεσα στο πλοίο και στην ξηρά.

#### Προσομοίωση χειρισμού και ελιγμών πλοίου

69 Εκτός από την συμμόρφωση με τα πρότυπα λειτουργίας που καθορίζονται στην παράγραφο 37 ο εξοπλισμός προσομοίωσης χειρισμού πλοίου θα πρέπει:

- .1 να παρέχει ρεαλιστικό οπτικό σενάριο όπως φαίνεται από τη γέφυρα την ημέρα και την νύκτα με μεταβαλλόμενη ορατότητα σε όλο το οριζόντιο οπτικό πεδίο που είναι στη διάθεση του εκπαιδευόμενου σε τομείς όρασης που προσφέρονται για εκπαιδευτικές εργαισίες και τους αντικειμενικούς σκοπούς χερισμού του πλοίου και ελιγμών, και
- .2 Να προσομαιώνεται ρεαλιστικά η δυναμική συμπεριφορά του «ιδίου πλοίου» σε περιορισμένες θαλάσσιες οδούς περιλαμβανομένων των επιπτώσεων των αβαθών και των οχθών.

70 Πρότυπα κλίμακας επανδρωμένων χρησιμοποιούνται για να παρέχουν προσομοίωση χαρισμών και ελιγμών πλοίου, επιπρόσθετα των προτύπων λατουργίας που καθορίζονται στις παραγράφους 68.3 και 69.2. , τέταιος εξοπλισμός θα πρέπα :

- .1 να περιλαμβάνει παράγοντες κλίμακας που αντιπροσωπεύουν με ακρίβεια τις διαστάσεις, όγκο και εκτόπισμα, ταχύτητα, χρόνο και ρυθμό στροφής ενός πραγματικού πλοίου, και
- .2 να περιλαμβάνουν ελέγχους για το πηδάλιο και τις μηχανές στη σωστή κλίμακα χρόνου.

### Προσομοίωση χειρισμών φορτίου και στα βασίας

71 Ο εξοπλισμός προσομοίωσης χειρισμού φορτίου θα πρέπει να είναι σε θέση να προσομαιώνει τον εξοπλισμό χειρισμού και ελέγχου φορτίου ο οποίος ανταποκρίνεται σε όλα τα εφαρμοζόμενα πρότυπα λειτουργίας που έχουν γίνει αποδεκτά από τον Οργανισμό\* και να περιλαμβάνει ευκολίες για:

- .1 να δημιουργηθεί αποτελεσματικό επιχειρησιακό περιβάλλον στο οποίο περιλαμβάνεται σταθμός ελέγχου φορτίου με εκείνα τα όργανα που ενδεχομένως είναι απαραίτητα για τον συγκεκριμένο τύπο συστήματος φορτίου του οποίου γίνεται απομίμηση,
- .2 να είναι ικανό να κάνει απομίμηση των δραστηριοτήτων φόρτωσης και εκφόρτωσης και των καταλλήλων δεδομένων ευστάθειας και κινδύνου για τις εργασίες χειρισμού φορτίου που πρόκεται να γίνουν και για τη δεξιότητες που πρόκεται να αξιολογηθούν, και
- .3 προσομοίωση εργασιών φόρτωσης, εκφόρτωσης, ερματισμού και αφερματισμού και τους ανάλογους υπολογισμούς ευστάθειας, διαγωγής, κλίσης, διαμήκους αντοχής, στρεπτικής τάσεως και ζημιών ευστάθειας\*.

#### Προσομοίωση επικα νωνιών GMDSS

72 Ο εξοπλισμός προσομοίωσης επικανωνιών GMDSS πρέπει να είναι σε θέση να προσομαιώσει εξοπλισμό επικανωνιών GMDSS που ανταποκρίνεται σε όλα τα εφαρμοζόμενα πρότυπα λειτουργίας που έχουν γίνει αποδεκτά από τον Οργανισμό τκαι να διαθέτει εγκαταστάσεις για:

<sup>\*</sup> Ο σχεπκές πρότυπες σειρές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταιμασία των εκπαιδεύσεων.

<sup>\* \*</sup> Δεν έχουν υ όθετηθεί ακόμα πρότυπα από τον Οργανισμό.

<sup>\*\*</sup> Βλέπε σχετικά/ κατάλληλα πρότυτα εκτέλεσης που υιοθετήθηκαν από τον Οργανισμό.

- .1 προσομοίωση της λειτουργίας του VHF,VHF-DSC, NAVTEX, EPIRB, και εξοπλισμού τήρησης φυλακής που απαιτείται από το Πιστοποιητικό Χειριστή Περιορισμένης χρήσης (ROC),
- .2 προσομοίωση της λειτουργίας των επίγειων σταθμών πλοίου INMARSAT A, -B και -C, MF/HF, NBDP, MF/HF-DSC, VHF, VHF-DSC, NAVTEX EPIRB και εξοπλισμού τήρησης φυλακής όπως απαιτείται από το Πιστοποιητικό Χειριστή Γενικής χρήσης (GOC),
- .3 Παροχή επικαινωνιών φωνής με θόρυβο βάθους,
- .4 Παροχή εγκατάστασης κανοποίησης εκτυπουμένου καμένου, κα
- .5 Δημιουργία επιχειρησιακού περιβάλλοντος πραγματικού χρόνου, που αποτελείται από ένα ολοκληρωμένο σύστημα το οποίο περιλαμβάνει τουλάχιστον ένα σταθμό καθηγητή / αξιολογητή και τουλάχιστον δύο σταθμούς GMDSS πλοίου ή ξηράς.

# Προσομοίωση λειτουργίας κυρίας μηχανής και βοηθητικών μηχανημάτων

- 73 Ο εξοπλισμός προσομοίωσης εγκαταστάσεων μηχανοστασίου πρέπει να είναι σε θέση να προσομοιώνει σύστημα κύριας μηχανής και βοηθητικών μηχανημάτων και να ενσωματώνει εγκαταστάσεις για:
  - .1 Δημιουργία περιβάλλοντος πραγματικού χρόνου για εργασίες εν πλω και σε λιμάνι με συσκευές επκοινωνίας και κατάλληλη προσομοίωση της κύριας μηχανής πρόωσης και βοηθητικών μηχανημάτων και πινάκων ελέγχου,
  - .2 προσομοίωση των σχετικών υποσυστημάτων που πρέπει να περιλαμβάνουν, αλλά δεν θα περιορίζονται στο λέβητα, πηδάλιο, σύστημα γενικής εγκατάστασης και διανομής ηλεκτρικής ισχύος περιλαμβανομένων των παροχών ηλεκτρικής ισχύος ανάγκης και συστημάτων καυσίμου, ύδατος,ψύξης, έρματος και σεντινών,
  - .3 παρακολούθηση και αξιολόγηση της λειτουργίας της μηχανής και των αισθητήριων συστημάτων που λειτουργούν εξ αποστάσεως,
  - .4 προσομοίωση δυσλειτουργίας μηχανημάτων,
  - .5 να επιτρέπει μεταβολή εξωτερικών συνθηκών έτσι ώστε να επιδρούν στις προσομαιούμενες λειτουργίες: και ρικές συνθήκες, βύθισμα πλοίου, θερμοκρασίες αέρα και θάλασσας,
  - .6 να επιτρέπει στις εξωτερικές συνθήκες που ελέγχονται από τον εκπαιδευτή να μεταβάλλονται: ατμός καταστρώματος, ατμός χώρων ενδιαίτησης, αέρας καταστρώματος, συνθήκες παγετού, γερανοί καταστρώματος, αυξημένη ισχύς, ελικοπηδάλιο, φορτίο πλοίου,
  - .7 να επιτρέπει αλλαγή προσομαιωτή δυναμικής που ελέγχεται από τον εκπαιδευτή: κατάσταση ανάγγκης, αντιδράσεις διαδικασιών, αντιδράσεις πλοίου, και
  - .8 να παρέχεται η εγκατάσταση απομόνωσης ορισμένων διεργασιών, όπως ταχύτητα, ηλεκτρικό σύστημα, σύστημα πετρελαίου Diesel, σύστημα λιπαντικού, σύστημα βαρέως πετρελαίου, σύστημα θαλασσίου ύδατος, σύστημα ατμού, καυσαέρια λέβητα και στροβιλογεννήτριας προκειμένου να πραγματοποιηθούν ειδικοί εκπαιδευτικοί στόχοι.

#### Τμήμα Β- 1/13

Οδηγίες όσον αφορά την διεξαγωγή δοκιμών

(Δεν υπάρχουν διατάξεις).

Τμήμα Β-1/14

Οδηγίες όσον αφορά τις ευθύνες των εταιριών και συνιστώμενες ευθύνες πλοιάρχου και μελών του πληρώματος

Οι σχεπκές πρότυπες σφιρές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταιμασία των εκπαιδεύσεων.

#### Ετα ρείες

- 1 Οι Εταιρείες πρέπει να εφοδιάζουν το πλοίο με συγκεκριμένα εισαγωγικά προγράμματα που σκοπεύουν να βοηθήσουν τους νεοαπασχολούμενους ναυτικούς να εξαικειωθούν με όλες τις διεργασίες και εξοπλισμό που είναι σχετικά με την περιοχή ευθύνης τους. Οι Εταιρείες πρέπει να διασφαλίζουν ότι:
  - .1 όλοι οι ναυτικοί σε πλοίο εξοπλισμένο με σωστικές λέμβους ελεύθερης πτώσης πρέπει να λαμβάνουν εκπαίδευση εξοικείωσης στις διαδικασίες ανέλκυσης και επιβίβασης για κάθε σωστική λέμβο,
  - .2 πριν την επιβίβαση σε πλοίο οι ναυτικοί που ορίζονται ως προσωπικό λειτουργίας των σωστικών λέμβων ελεύθερης πτώσης πρέπει να έχουν εκπαιδευτεί στην επιβίβαση, ανέλκυση και ανάκτηση τέτοιων σωστικών λέμβων, συμπεριλαμβανομένης της συμμετοχής σε τουλάχιστον μια ανέλκυση ελεύθερης πτώσης, και
  - .3 προσωπικό που μπορεί να χρειάζεται για να λειτουργεί ο εξοπλισμός GMDSS να λαμβάνει εκπαίδευση εξακείωσης με το GMDSS, κατά την επιβίβαση στο πλοίο και σε τακτικά χρονικά διαστήματα.
- 2 Η εκπαίδευση εξαικείωσης που απαιτείται από την παράγραφο 3 του τμήματος Α-Ι/14 πρέπει τουλάχιστον να διασφαλίζει επίτευξη ικανοτήτων που είναι απαραίτητες για την ειδικότητα και τα καθήκοντα και τις ευθύνες ως ακολούθως:

Σχεδιασμός και επιχειρησιακοί περιορισμοί

.1 Ικανότητα να κατανοούν και να παρατηρούν επιχειρησιακούς περιορισμούς που επιβάλλονται στο πλοίο και να κατανοεί και εφαρμόζει τους περιορισμούς εκτέλεσης, περιλαμβάνοντας περιορισμούς ταχύτητας σε δυσμενείς καιρικές συνθήκες, που έχουν στόχο τη διατήρηση ασφάλειας ζωής, πλοίου και φορτίου.

Διαδικασίες ανοίγματος, κλεισίματος και ασφάλισης των ανοιγμάτων του κύτους

.2 Ικανότητα να εφαρμόζει κατάλληλα τις διαδικασίες που θεσπίζονται για το πλοίο σχετικά με το άναγμα, κλείσιμο και ασφάλιση της πλώρης, πρύμνης και πλευρικών θυρών κι ραμπών και να λειτουργούν ορθά τα σχετικά συστήματα.

Νομοθεσία, κώδικες και συμφωνίες που επηρεάζουν τα ro-ro επιβατηγά πλοία

.3 Ικανότητα να κατανοεί και εφαρμόζει διεθνείς και εθνικές απαιτήσεις για ro-ro επιβατηγά πλοία σχετικές με το πλοίο και τα καθήκοντα προς εκτέλεση.

Ευστάθεια και απαιτήσεις και περιορισμοί κινδύνου

.4 Ικανότητα να λαμβάνει υπόψη τους περιορισμούς κινδύνου για ευαίσθητα τμήματα του πλοίου, όπως τις θύρες της πλώρης και άλλες συσκευές κλεισίματος που τηρούν την στεγανότητα και ιδιαίτερων εξετάσεων ευστάθειας που μπορεί να επηρεάζουν την ασφάλεια των το-το επιβατηγών πλοίων.

Διαδικασίες για την τήρηση ειδικού εξοπλισμού σε ro-ro επιβατηγά πλοία

.5 Ικανότητα για να εφαρμόζει κατάλληλα στο πλοίο τις διαδικασίες τήρησης ιδιαίτερου εξοπλισμού σε το-το επιβατηγά πλοία όπως πλώρη, πρύμνη και πλευρικές θύρες και ράμπες, οπές και σχετικά συστήματα.

Εγχειρίδια φόρτωσης και ασφάλισης φορτίου και υπολογισμοί

.6 Ικανότητα να χρησιμοποιούν ορθά τα εγχειρίδια φόρτωσης και ασφάλισης όσον αφορά όλους τους τύπους οχημάτων όπου εφαρμόζεται, και να υπολογίζει και εφαρμόζει τους περιορισμούς κινδύνου για οχήματα καταστρώματος.

Επικίνδυνες περιοχές φορτίου

.7 Ικανότητα για να διασφαλίζει κατάλληλη παρατήρηση ειδικών προφυλάξεων και περιορισμών που ισχύουν στις ορισμένες επικίνδυνες περιοχές φορτίου.

Διαδικασίες έκτακτης ανάγκης

- .8 Ικανότητα εξασφάλισης κατάλληλης εφαρμογής ειδικών διαδικασιών για να :
  - .8.1 προλαμβάνει ή μειώνει την είσοδο υδάτων στα καταστρώματα οχημάτων,
  - .8.2 απομακρύνει τα ύδατα από τα καταστρώματα οχημάτων, και
  - .8.3 ελαχιστοποιεί τα αποτελέσματα του ύδατος στα καταστρώματα οχημάτων.

## Πλοίαρχος

- 3 Ο Πλοίαρχος πρέπει να λαμβάνει όλα τα απαραίτητα μέτρα για την εφαρμογή των οδηγιών της εταιρίας που εκδίνονται σύμφωνα με το τμήμα Α- Ι/14. Σε αυτά τα μέτρα πρέπει να περιλαμβάνονται:
  - .1 αναγνώριση όλων των ναυτικών που πρόσφατα ναυτολογήθηκαν, προτού τους ανατεθούν καθήκοντα,
  - .2 παροχή δυνατότητας σε όλους τους ναυτικούς που πρόσφατα επιβιβάσθηκαν να:
    - .2.1 Επισκεφθούν τους χώρους που θα εκτελούν τα κύρια καθήκοντα τους,
    - .2.2 Εξακειωθούν με τη θέση, διατάξεις ελέγχου και χαρακτηριστικά απεικόνισης του εξοπλομού που θα χειρίζονται ή θα χρησιμοποιούν,
    - .2.3 Ενεργοπαιούν όποτε είναι δυνατόν τον εξοπλισμό και να εκτελούν εργασίες χρησιμοπαιώντας τις διατάξεις ελέγχου του εξοπλισμού, και
    - .2.4 Παρατηρούν και να ερωτούν οποιονδήποτε είναι ήδη εξαικειωμένος με τον εξοπλισμό, διεργασίες και άλλες ρυθμίσεις και ο οποίος μπορεί να κοινοπαιεί πληροφορίες ί σε γλώσσα που ο ναυτικός καταλαβαίνει, και
  - .3 να παρέχεται επαρκές χρονικό διάστημα επιτήρησης όταν υπάρχει αμφιβολία ως προς το κατά πόσον ο νεοναυτολογηθείς ναυτικός είναι εξοικειωμένος με τον εξοπλισμό του πλοίου, λειτουργικές διαδκασίες και άλλες ρυθμίσεις που απαιτούνται για τη σωστή εκτέλεση των καθηκόντων του/ της.

#### Μέλη πληρώματος

- 4 Ναυτικοί που έχουν πρόσφατα ναυτολογηθεί σε πλοίο πρέπει να εκμεταλλεύονται κάθε ευκαιρία που τους δίνεται ώστε να εξακειωθούν με τον εξοπλισμό του πλοίου, τις λειτουργικές διαδικασίες και άλλες ρυθμίσεις που απαιτούνται για τη σωστή εκτέλεση των καθηκόντων τους. Αμέσως μετά την αρχική επιβίβαση, κάθε ναυτικός έχει υποχρέωση να προσαρμοσθεί με το εργασιακό περιβάλλον του πλοίου ιδιαίτερα όσον αφορά νέο και άγνωστο εξοπλισμό, διαδικασίες ή ρυθμίσεις με τις οποίες δεν είναι εξαικειωμένος.
- 5 Ναυτικοί που δεν κατορθώνουν να επιτύχουν το επίπεδο εξαικείωσης που απαιτείται για την εκτέλεση των καθηκόντων τους έχουν υποχρέωση να το γνωστοπαιήσουν στον επιτηρητή τους ή στο μέλος του πληρώματος που έχει καθορισθεί σύμφωνα με το τμήμα Α-Ι/14, παράγραφος 2.2. και να προσδιορίσουν όποιο εξοπλοφό, διαδικασία ή ρύθμιση με την οποία δεν έχουν εξοικειωθεί ακόμη.

Τμήμα Β-1/15

Οδηγίες αναφορικά με μεταβατικές διατάξεις

(δέν υπάρχουν προβλέψεις)

#### ΚΕΦΑΛΑΙΟ ΙΙ

## Οδηγίες όσον αφορά τον πλοίαρχο και το προσωπικό καταστρώματος

#### Τμήμα Β-ΙΙ/1

Οδηγίες όσον αφορά την πιστοποίηση αξιωματικών που είναι υπεύθυνοι φυλακής ναυσιπλοΐας σε πλοία 500 ο.χ. και άνω

#### Εκπαίδευση

- 1 Κάθε υποψήφιος για πιστοποίηση σαν αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας πρέπει να έχει ολοκληρώσει κατάλληλα σχεδιασμένο και δομημένο πρόγραμμα εκπαίδευσης που έχει εκπονηθεί για να βοηθά τον μέλλοντα αξιωματικό να επιτύχει επίπεδο ικανότητας σύμφωνα με τον πίνακα Α-ΙΙ/1.
- 2 Η δομή του προγράμματος εκπαίδευσης πρέπει να καθορίζεται σε σχέδιο εκπαίδευσης που σαφώς εκφράζει για τα ενδιαφερόμενα Συμβαλλόμενα Μέρη τους αντικειμενικούς σκοπούς κάθε βαθμίδας εκπαίδευσης τόσο στο πλοίο όσο και στην ξηρά. Είναι σημαντικό όπως ο μελλοντικός αξιωματικός, οι εκπαιδευτές το προσωπικό του πλοίου και το προσωπικό της εταιρείας είναι ενήμερα ως προς τις ικανότητες που πρόκεται να επιτευχθούν στο τέλος του προγράμματος και πως αυτές επιτυγχάνονται μέσω συνδυασμένης, εκπαίδευσης, άσκησης και πρακτικής εμπειρίας τόσο στο πλοίο όσο και στην ξηρά.
- 3 Οι υποχρεωτικές περίοδοι θαλάσσιας υπηρεσίας είναι πρωταρχικής σημασίας για την απόκτηση της απαραίτητης γνώσης που απαιτείται σε αξιωματικό πλοίου και να αποκτήσει το επίπεδο ικανότητας που είναι αναγκαία. Σωστά σχεδιασμένες και δομημένες περίοδοι θαλάσσιας υπηρεσίας θα δώσουν την δυνατότητα στους μελλοντικούς αξιωματικούς να αποκτήσουν και εφαρμόσουν τις απαραίτητες δεξιότητες και θα προσφέρουν ευκαιρίες να επιδειχθούν και αξιολογηθούν οι επιτευχθείσες δεξιότητες.
- 4 Όπου η θαλάσσια υπηρεσία αποτελεί τμήμα εγκεκριμένου προγράμματος εκπαίδευσης πρέπει να τηρούνται οι παρακάτω αρχές:
  - .1 Το πρόγραμμα εκπαίδευσης στο πλοίο θα είναι αναπόσπαστο τμήμα ενός γενικού σχεδίου εκπαίδευσης.
  - .2 Το πρόγραμμα εκπαίδευσης στο πλοίο πρέπει να διευθύνεται και συντονίζεται από την εταιρεία που διαχειρίζεται το πλοίο στο οποίο πραγματοποιείται η θαλάσσια υπηρεσία.
  - .3 Ο μελλοντικός αξιωματικός πρέπει να εφοδιάζεται με εγχειρίδιο εκπαίδευσης\* για να είναι δυνατή η καταγραφή της πρακτικής εκπαίδευσης και εμπειρίας που αποκτάται στη θάλασσα. Το εγχειρίδιο εκπαίδευσης πρέπει να έχει τέταια διάταξη ώστε να είναι δυνατή η λεπτομερής αναφορά των ενεργειών και καθηκόντων τα οποία πρέπει να αναληφθούν και η πρόοδος ως προς την ολοκλήρωσή τους. Το πλήρως συμπληρωμένο εγχειρίδιο εκπαίδευσης θα είναι το μοναδικό αποδεικτικό σταιχείο ότι το πρόγραμμα εκπαίδευσης στο πλοίο έχει ολοκληρωθεί και μπορεί να λαμβάνεται υπόψη στη διαδικασία αξιολόγησης της ικανότητας του ναυτικού για την έκδοση πιστοπαιητικού.
  - .4 Πάντοτε ο μελλοντικός αξιωματικός πρέπει να είναι ενήμερος για δύο άτομα τα οποία γνωρίζει και που είναι άμεσα υπεύθυνοι για τη διαχείριση του προγράμματος εκπαίδευσης στο πλοίο. Ο πρώτος εξ αυτών είναι προσοντούχος αξιωματικός, μνημονεύεται ως ο επί του πλοίου αξιωματικός εκπαίδευσης, ο οποίος, με εξουσιοδότηση του πλαάρχου, θα οργανώνει και επιβλέπει το πρόγραμμα εκπαίδευσης κατά την διάρκεια κάθε πλου. Ο δεύτερος θα είναι άτομο που ορίζεται από την εταιρεία, και αναφέρεται ως αξιωματικός εκπαίδευσης της εταιρείας, που θα έχει την ολική ευθύνη του προγράμματος εκπαίδευσης και το συντονισμό με κολέγια και εκπαίδευτικά ιδρύματα.
  - .5 Η εταιρεία πρέπα να εξασφαλίζα ότι ορίζονται κατάλληλες περίοδοι για την ολοκλήρωση του προγράμματος της επί του πλοίου εκπαίδευσης, εντός των ορίων των συνηθισμένων επιχαιρησιακών απαιτήσεων του πλοίου.

<sup>\*</sup> Ο σχετικές πρότυπες συρές εκπαίδευσης ΙΜΟ και ένα παρόμαιο έγγραφο εκδοθέν από τη Διεθνή Ναυτιλιακή Ομοσπονδία, μπορεί να βοηθούν στην προεταμασία των εγχυριδίων εκπαίδευσης.

#### Ρόλα κα ευθύνες

- 5 Το παρακάτω τμήμα δίνει περιληπτικά τους ρόλους και ευθύνες των ατόμων που εμπλέκονται στην οργάνωση και υλοποίηση της εκπαίδευσης στο πλοίο:
  - .1 Ο αξιωματικός εκπαίδευσης της εταιρείας θα είναι υπεύθυνος για:
    - .1.1 την γενική διαχείριση του προγράμματος εκπαίδευσης,
    - .1.2 την παρακολούθηση της προόδου του μελλοντικού αξιωματικού καθ' όλη τη διάρκεια του προγράμματος, κα
    - .1.3 την έκδοση των οδηγιών που απαιτούνται και εξασφάλιση ότι όλαι οι εμπλεκόμενοι με το πρόγραμμα εκπαίδευσης εξαντλούν τις υποχρεώσεις τους.
  - .2 Ο αξιωματικός εκπαίδευσης στο πλοίο είναι υπεύθυνος για:
    - .2.1 την οργάνωση του προγράμματος πρακτικής εκπαίδευσης εν πλω,
    - .2.2 να εξασφαλίζει με την ιδιότητα του επιβλέποντος, ότι το εγχειρίδιο εκπαίδευσης τηρείται σωστά και πληρούνται όλες οι απαιτήσεις, και
    - .2.3 Να βεβαιώνεται, όσο αυτό είναι πρακτικά δυνατόν, ότι ο χρόνος που ο μελλοντικός αξιωματικός περνά στο πλοίο είναι κατά το μέτρο του δυνατού επωφελής όσον αφορά την εκπαίδευση και εμπειρία και ικανοποιεί τους αντικειμενικούς σκοπούς του προγράμματος εκπαίδευσης, την πρόοδο της εκπαίδεύσης και τους επιχειρησιακούς περιορισμούς του πλοίου.
  - .3 Οι ευθύνες του πλοιάρχου πρέπει να είναι:
    - .3.1 Να ενεργεί ως σύνδεσμος μεταξύ του αξιωματικού εκπαίδευσής στο πλοίο και του αξιωματικού εκπαίδευσης της εταιρείας στη ξηρά,
    - .3.2 Να διασφαλίζει την συνεχεία της εκπαίδευσης αν ο αξιωματικός εκπαίδευσης στο πλοίο απαλλαχθεί κατά τη διάρκεια του πλου, και
    - .3.3 Να εξασφαλίζει ότι όλοι οι ενδιαφερόμενοι εκτελούν αποτελεσματικά το πρόγραμμα εκπαίδευσης στο πλοίο.
  - .4 Οι ευθύνες του μελλοντικού αξιωματικού πρέπει να είναι:
    - .4.1 Να παρακολουθεί επιμελώς το πρόγραμμα εκπαίδευσης όπως αυτό έχει εκπονηθεί,
    - .4.2 Να κάνει την καλύτερη δυνατή χρήση των ευκαιριών που παρουσιάζονται, άσχετα αν αυτές είναι εντός ή εκτός των ωρών εργασίας, και
    - .4.3 Να τηρεί το εγχαρίδιο εκπαίδευσης ενήμερο και να εξασφαλίζει ότι είναι πάντοτε διαθέσιμο για έλεγχο.

#### Εξασφάλιση συνέχειας

6 Κατά την έναρξη του προγράμματος και στην αρχή κάθε πλου σε διαφορετικό πλοίο, α μελλοντικοί αξιωματικοί θα πρέπει να λαμβάνουν σαφείς πληροφορίες και οδηγίες όσον αφορά, το τι αναμένεται από αυτούς και πως το πρόγραμμα εκπαίδευσης πρόκειται να οργανωθεί. Η εξασφάλιση συνέχειας δίδει στους μελλοντικούς αξιωματικούς την ευκαιρία να ενημερωθούν όσον αφορά τις σημαντικές πτυχές των εργασιών που θα αναλάβουν, με ιδιαίτερη αναφορά στις πρακτικές ασφαλούς εργασίας και προστασίας του θαλάσσιου περιβάλλοντος.

# Πρόγραμμα εκπαίδευσης στο πλοίο

7 Το εγχειρίδιο εκπαίδευσης πρέπει να περιλαμβάνει μεταξύ άλλων ένα αριθμό εργασιών ή καθηκόντων εκπαίδευσης που πρέπει να αναληφθούν σαν τμήμα εγκεκριμένου προγράμματος εκπαίδευσης στο πλοίο. Τέτας φύσεως εργασίες και καθήκοντα πρέπει να έχουν σχέση τουλάχιστον με τις εξής περιοχές:

- .1 Συστήματα πηδαλιουχίας,
- .2 Γενική ναυτική τέχνη,
- .3 Πρόσδεση, αγκυροβολία και εργασίες λιμένα,
- .4 Συσκευές διάσωσης και πυρόσβεσης,
- .5 Συστήματα και εξοπλισμός,
- .6 Εργασίες φορτίου,
- .7 Εργασίες γέφυρας και τήρηση φυλακής, και
- .8 Εξαικείωση με μηχανοστάσιο.
- 8 Είναι πάρα πολύ σημαντικό όπως στο μελλοντικό αξιωματικό δίνονται επαρκείς ευκαιρίες για απόκτηση εμπειρίας τήρησης φυλακής γέφυρας υπό επιτήρηση, ιδιαίτερα στα μεταγενέστερα στάδια του προγράμματος εκπαίδευσης στο πλοίο.
- 9 Η απόδοση των μελλοντικών αξιωματικών σε κάθε μία από τις αναφερόμενες στο εγχαρίδιο εκπαίδευσης εργασίες και καθήκοντα θα πρέπα να μονογραφείται από προσοντούχο αξιωματικό όταν, κατά τη γνώμη του εν λόγω αξιωματικού, ο μελλοντικός αξιωματικός έχα επιτύχα επαρκές επίπεδο ικανότητας. Είναι σημαντικό ο μελλοντικός αξιωματικός να επιδακνύει τις ικανότητές του σε αρκετές περιπτώσεις πριν ο προσοντούχος αξιωματικός πασθεί ότι έχα επιτευχθεί ικανοποιητικό επίπεδο ικανότητας.

#### Παρακολούθηση και απολογισμός

10 Οι οδηγίες και ο απολογισμός είναι ουσιώδεις για να εξασφαλισθεί ότι οι μελλοντικοί αξιωματικοί είναι πλήρως ενήμεροι για την πρόοδο τους και να τους δίνεται η δυνατότητα να συμμετέχουν σε αποφάσεις περί του μελλοντικού τους προγράμματος. Για να είναι αποτελεσματικός, ο απολογισμός πρέπει να συνδέεται με τις πληροφορίες που αποκτώνται μέσω του ημερολογίου εκπαίδευσης και άλλων πηγών ανάλογα με τη περίπτωση. Το εγχειρίδιο εκπαίδευσης πρέπει να ελέγχεται και να οπισθογραφείται τυπικά από τον Πλοίαρχο και τον αξιωματικό εκπαίδευσης του πλοίου στην αρχή, κατά τη διάρκεια και στο τέλος κάθε πλού. Το εγχειρίδιο εκπαίδευσης πρέπει επίσης να εξετάζεται και να οπισθογραφείται από τον αξιωματικό εκπαίδευσης της εταιρείας μεταξύ των ταξιδίων.

#### Αξιολόγηση των ικανοτήτων και δεξιοτήτων κατά την τήρηση φυλακής ναυσιπλοΐας

- 11 Ο υποψήφιος για πιστοποίηση που απαιτείται να έχει υποβληθεί σε ειδική εκπαίδευση και αξιολόγηση των ικανοτήτων και δεξιστήτων σε καθήκοντα τήρησης φυλακής είναι απαραίτητο να μπορεί να αποδείξει, με επίδειξη είτε σε προσομαιωτή ή σε πλοίο ως τμήμα ενός εγκεκριμένου προγράμματος επί πλοίου εκπαίδευσης, ότι έχει αποκτήσει τις απαιτούμενες δεξιότητες και ικανότητες ιώστε να λειτουργήσει ως αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας τουλάχιστον στις εξής περιοχές:
  - .1 Προεταιμασία και πραγματοποίηση πλου που περιλαμβάνει:
    - .1.1 Ερμηνεία και εφαρμογή πληροφοριών που λαμβάνονται από χάρτη,
    - .1.2 Εντοπισμός στίγματος σε παράκπα ύδατα,
    - .1.3 Εφαρμογή βασικών πληροφοριών που λαμβάνονται από πίνακες παλιρραιών και άλλες ναυτιλιακές εκδόσεις.
    - .1.4 Έλεγχος και χρήση του εξοπλισμού γέφυρας,
    - .1.5 Έλεγχος των μαγνηπικών και γυροσκοπικών πυξίδων,
    - .1.6 Αξιολόγηση των διαθέσιμων μετεωρολογικών τεληροφοριών,
    - .1.7 Χρήση ουρανίων σωμάτων για καθορισμό στίγματος,

- .1.8 Προσδιορισμός του σφάλματος πυξίδας με ουράνια και γήινα μέσα, και
- .1.9 Εκτέλεση υπολογισμών για πλόες διαρκείας μέχρι 24 ωρών.
- .2 Χειρισμός ηλεκτρονικών συστημάτων ναυσιπλοΐας και εφαρμογή των παρεχομένων πληροφοριών,
- .3 Χειρισμός ραντάρ και ARPA και ECDIS και εφαρμογή των πληροφοριών του ραντάρ για ναυσιπλοΐα και αποφυγή συγκρούσεων,
- .4 Χειρισμός συστημάτων πρόωσης και πηδαλουχίας για τον έλεγχο πορείας και ταχύτητας,
- .5 Εφαρμογή συνήθων ενεργειών και διαδικασιών φυλακής ναυσιπλοΐας,
- .6 Εφαρμογή των ελιγμών που απαιτούνται για τη διάσωση ατόμων που είναι στη θάλασσα,
- .7 εκτέλεση των απαιτουμένων ενεργειών σε περίπτωση επικείμενης κατάστασης ανάγκης (π.χ. πυρκαϊά, σύγκρουση, προσάραξη) και λήψη μέτρων αμέσως μετά την κατάσταση ανάγκης,
- .8 εκτέλεση των απαιτουμένων ενεργειών σε περίπτωση δυσλειτουργίας ή βλάβης μεγάλης σημασίας μηχανημάτων ή εγκαταστάσεων (π.χ. μηχανισμός πηδαλουχίας, συστήματα ισχύος και ναυσιπλοΐας),
- .9 πραγματοποίηση επικανωνιών με χρήση ραδιοεπικανωνιακών συστημάτων και οπτικών και ακουστικών σημάτων σε κανονικές συνθήκες και σε καταστάσεις ανάγκης, και
- .10 Παρακολούθηση και χειρισμός των συστημάτων ασφαλείας και συναγερμού περιλαμβανομένου και του συστήματος ενδοεπικαινωνίας.
- 12 Η αξιολόγηση των ικανοτήτων και δεξιοτήτων κατά τη τήρηση φυλακής θα πρέπει:
  - .1 Να γίνεται με βάση τα κριτήρια αξιολόγησης ικανότητας για τη λειτουργία της ναυσιπλοΐας που καθορίζονται στον πίνακα Α-11/1,
  - .2 Να εξασφαλίζεται ότι ο υποψήφιος εκτελεί τα καθήκοντα τήρησης φυλακής σύμφωνα με τις Αρχές που πρέπει να τηρούνται κατά τη τήρηση ασφαλούς φυλακής ναυσιπλοΐας (τμήμα Α- ΙΙΙ/2 τμήμα 3- 1) και τις οδηγίες για τη τήρηση φυλακής ναυσιπλοΐας (τμήμα Β ΙΙΙ/2 τμήμα 3-1).

#### Αξιολόγηση της ικανότητας

- 13 Το επίπεδο ικανότητας που πρέπει να επιτευχθεί για πιστοποίηση ως αξιωματικός υπεύθυνος φυλακής ναυσιπλοΐας καθορίζεται στον Πίνακα Α-ΙΙ/1. Το πρότυπο καθορίζει τις γνώσεις και δεξιότητα που απαιτούνται και την εφαρμογή αυτών των γνώσεων και δεξιοτήτων ως προς το απαιτούμενο επίπεδο απόδοσης στο πλοίο.
- 14 Η επαγγελμαπκή ικανότητα είναι άμεσα συνδεδεμένη με την γνώση. Η αξιολόγηση της ικανότητας θα πρέπει επομένως, να περικλείει περισσότερα από τις άμεσες τεχνικές απαιτήσεις για την εργασία, τις δεξιότητες και τις εργασίες που πρέπει να πραγματοποιούνται και να ανχνεύει ευρύτερες περιοχές στις οποίες πρέπει να ανταποκρίνεται ο υποψήφιος, απαραίτητες για την πλήρη ικανοποίηση των απαιτήσεων απασχόλησης με την ιδιότητα του αξιωματικού του πλοίου. Σε αυτό περιλαμβάνονται οι σχετικές γνώσεις, θεωρία, αρχές και νοητικές ικανότητες, οι οποίες σε πακίλους βαθμούς, ενισχύουν όλα τα επίπεδα ικανότητας. Περικλείει επίσης την επαγγελματική επάρκεια στο τι, πότε και πως και γιατί θα ενεργήσει. Με σωστή εφαρμογή των παραπάνω θα εξασφαλισθεί ότι ο υποψήφιος είναι σε θέση:
  - .1 να εργασθεί αποδοπκά σε διαφορετικά πλοία και σε ένα εύρος καταστάσεων,
  - .2 προβλέπει, προεταιμάζεται και αντιμετωπίζει καταστάσεις ανάγκης, και
  - .3 προσαρμόζεται σε νέες και μεταβαλλόμενες απαιτήσεις.
- 15 Τα κριτήρια αξιολόγησης ικανότητας ( στήλη 4 του πίνακα Α-ΙΙ/1) εντοπίζουν, αρχικά με όρους αποτελέσματος, τις ουσιώδεις πτυχές της ικανότητας. Εκφράζονται κατά τέταιο τρόπο ώστε η αξιολόγηση της απόδοσης του υποψηφίου να μπορεί να γίνει ως προς αυτά και θα πρέπει να είναι επαρκώς τεκμηριωμένα στο εγχειρίδιο εκπαίδευσης.

16 Αξιολόγηση της ικανότητας είναι η διαδικασία της:

- .1 συλλογής επαρκών ισχυρών και αξιόπιστων αποδεικτικών σταιχείων όσον αφορά τις γνώσεις, την κατανόηση και επάρκεια του υποψηφίου για να εκτελέσει εργασίες καθήκοντα και ευθύνες που παρατίθενται στη στήλη 1 του πίνακα Α-Ι/1, και
- .2 αξιολόγησης των αποδεικτικών αυτών στοιχείων ως προς τα κριτήρια που καθορίζονται στα πρότυπα.

17 Οι ρυθμίσεις για την αξιολόγηση της ικανότητας πρέπει να εκπονηθούν έτσι ώστε να λαμβάνουν υπόψη τις διαφορετικές μεθόδους αξιολόγησης που μπορεί να παρέχουν διαφορετικοί τύποι αποδεικτικών στοιχείων όσον αφορά την ικανότητα του υποψηφίου π.χ.:

- .1 άμεση παρατήρηση των δραστηριοτήτων κατά την εργασία (περιλαμβανομένης της θαλάσσιας υπηρεσίας),
- .2 εξετάσεις δεβοτήτων/ επάρκειας/ ικανότητας,
- .3 σχέδια και ανατεθείσες εργασίες,
- .4 αποδεικτικά στοιχεία από προγενέστερη εμπειρία, και
- .5 τεχνικές υποβολής γραπτών, προφορικών και βασισμένων σε υπολογιστή ερωτήσεων\*.

18 Μία ή περισσότερες από τις πρώτες τέσσερις μεθόδους που παρατίθενται πρέπει σχεδόν κατά κανόνα να χρησιμοποιούνται για να δίδουν αποδεικτικά στοιχεία ικανότητας, επιπρόσθετα των κατάλληλων τεχνικών ερωτήσεων που παρέχουν αποδείξεις βασικών γνώσεων και κατανόησης.

#### Εκπαίδευση στην αστρονομική ναυα πλοΐα

19 Οι ακόλουθες περιοχές περιγράφουν περιληπτικά την συνιστώμενη εκπαίδευση στην αστρονομική ναυσιπλοΐα:

- .1 ορθή προσαρμογή εξάντα για ρυθμιζόμενα λάθη,
- .2 καθορισμός διορθωμένης ανάγνωσης του ύψους του εξάντα των επίγειων σωμάτων,
- .3 ακριβής υπολογισμός μείωσης οπιικότητας, χρησιμοποιώντας επιθυμητή μέθοδο,
- .4 υπολογισμός της ώρας του ύψους του μεσημβρινού ήλιου,
- .5 υπολογισμός γεωγραφικού πλάτους με Polaris ή με το μεσημβρινό ύψος ήλιου,
- .6 ακριβής αποτύπωση γραμμών στίγματος και θέσης,
- .7 καθορισμός ώρας ανατολής -δύσης ήλιου ,με την επιθυμητή μέθοδο,
- .8 αναγνώριση και επιλογή των πιο κατάλληλων επίγειων σωμάτων κατά τη δύση.
- .9 καθορισμός λαθών πυξίδας με γωνία αζιμούθιου ή με ύψος, χρησιμοπαώντας την επιθυμητή μέθοδο,
- .10 ναυτική αστρονομία όπως απαιτείται για την υποστήριξη της απαιτούμενης ικανότητας στις παραγράφους 19.1 έως 19.9 ανωτέρω.

20 Εκπαίδευση στην αστρονομική ναυσιπλοΐα μπορεί να περιλαμβάνει τη χρήση ηλεκτρονικών ναυτικών ημερολογίων και λογισμικό υπολογισμού αστρονομικής ναυσιπλοΐας.

#### Τμήμα Β - 11/2

Οδηγίες όσον αφορά την πιστοποίηση πλοιάρχων και υποπλοιάρχων πλοίων 500 ο.χ. και άνω.

Οι σχετικές πρότυτες σειρές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταιμασία των εκπαιδεύσεων

(βλέπε Τμήμα Β-ΙΙ/1 για παροχή οδηγιών)

Τμήμα Β - ΙΙ/3

Οδηγίες όσον αφορά την πιστοποίηση αξιωματικών που είναι υπεύθυνοι τήρησης φυλακής ναυσιπλοΐας και πλοιάρχων πλοίου μικρότερων των 500 ο.χ.

(βλέπε Τμήμα Β-ΙΙ/1 για παροχή οδηγιών)

Τμήμα Β - ΙΙ/4

Οδηγίες όσον αφορά τα μέλη του πληρώματος που αποτελούν τμήμα φυλακής ναυσιπλοΐας.

1 Εκτός των απαιτήσεων που παρατίθενται στον πίνακα Α-ΙΙ/4 αυτού του Κώδικα, τα Μέρη ενθαρρύνονται για λόγους ασφαλείας να περιλάβουν τα παρακάτω θέματα στην εκπαίδευση μελών του πληρώματος που αποτελούν τμήμα φυλακής ναυσιπλοΐας.

- .1 Βασικές γνώσεις των Διεθνών Κανονισμών Πρόληψης Συγκρούσεων στη Θάλασσα,
- .2 Τοποθέτηση της κλίμακας του πλοηγού,
- .3 Κατανόηση των εντολών που δίνονται στον πηδαλιούχο από πλοηγούς στα Αγγλικά,
- .4 Εκπαίδευση επάρκειας σε σκάφη επιβίωσης και λέμβους διάσωσης,
- .5 Καθήκοντα υποστήριξης όταν γίνεται παραβολή και απομάκρυνση από προβλήτα και κατά τη διάρκεια εργασιών ρυμούλκησης,
- .6 Βασική γνώση σγκυροβολίας,
- .7 Βασική γνώση επικίνδυνων φορτίων,
- .8 Βασική γνώση των διαδικασιών σταβασίας και ρύθμισης παράδοσης εφοδίων στο πλοίο, και
- .9 Βασική γνώση συντήρησης καταστρώματος και εργαλεία που χρησιμοποιόνται στο κατάστρωμα.

Τμήμα B - II/5

Οδηγίες που αφορούν την πιστοποίηση κατώτερου πληρώματος ως προσοντούχος ναυτικός καταστρώματος

Η εκπαίδευση στο πλοίο πρέπει να σταχειωθετείται με έγγραφα σε εγκεκριμένο εγχειρίδιο εκπαίδευσης.

#### ΚΕΦΑΛΑΙΟ ΙΙΙ

#### Οδηγίες όσον αφορά το τμήμα μηχανής

#### Τμήμα Β-ΙΙΙ/1

Οδηγίες όσον αφορά την πιστοποίηση των αξιωματικών που είναι υπεύθυνοι φυλακής μηχανής σε επανδρωμένο μηχανοστάσιο ή που έχουν ορισθεί ως αξιωματικοί υπηρεσίας σε περιοδικά μη επανδρωμένο μηχανοστάσιο

- 1 Στον πίνακα Α-ΙΙΙ/1 στήλη 1, στο άνω τμήμα, στα εργαλεία τα οποία μνημονεύονται θα πρέπει να περιλαμβάνονται εργαλεία χειρός, συνηθισμένος εξοπλισμός μετρήσεων, κεντρικούς τόρνους, διατρηπικές μηχανές, εξοπλισμός ηλεκτροσυγκολλήσεων και φρέζες κατά περίπτωση.
- 2 Η εκτιαίδευση σε δεβότητες συνεργείου στην ξηρά μπορεί να γίνα σε εκπαιδευτικό ίδρυμα ή σε εγκεκριμένο συνεργείο.
- 3 Η εκπαίδευση στο πλοίο πρέπει να είναι επαρκώς τεκμηριωμένη στο βιβλίο εγγραφών εκπαίδευσης από προσοντούχους αξιολογητές.

#### Τμήμα Β-ΙΙΙ/2

Οδηγίες όσον αφορά την πιστοποίηση πρώτων μηχανικών και δεύτερων μηχανικών πλοίου που κινούνται από κύρια μηχανής ισχύος 3000 KW ή και μεγαλύτερη

(Δεν υπάρχουν διατάξεις)

Οδηγίες που αφορούν την εκπαίδευση του προσωπικού μηχανής που έχουν ευθύνες διοίκησης για την λειτουργία και την ασφάλεια εγκατάστασης ηλεκτρικής ισχύος άνω 1000 volts

- 1 Η εκπαίδευση προσωπικού μηχανής που έχουν ευθύνες διοίκησης για την λειτουργία και την ασφάλεια της εγκατάστασης ηλεκτρικής ισχύος άνω των 1000 V πρέπει τουλάχιστον να περιλαμβάνει:
  - .1 τις λειτουργικές, επιχειρησιακές και ασφάλειας απαιτήσεις για θαλάσσιο σύστημα υψηλής τάσης,
  - .2 ανάθεση κατάλληλα προσοντούχου προσωπικού για να διεξάγει τη διατήρηση και επισκευή υψηλής τάσεως μηχανισμού διάφορων τύπων,
  - .3 λήψη απαραίτητων διορθωτικών ενερ<u>γει</u>ών κατά <u>τη δ</u>ιάρκεια βλαβών στο σύ<u>στημ</u>α υψη<u>λής τ</u>άσεως,
  - .4 παρουσίαση εναλλασσόμενης στρατηγικής για απομονωμένα τμήματα συστήματος υψηλής τάσεως,
  - .5 επιλογή κατάλληλης συσκευής για απομόνωση και δοκιμή εξοπλισμού υψηλής τάσεως,
  - .6 διεκπαιρέωση διαδικασίας εναλλαγής και απομόνωσης θαλάσσιου συστήματος υψηλής τάσεως, στοιχειοθετημένη με έγγραφα ασφάλειας, και
  - .7 διεξαγωγή δοκιμών αντίστασης μόνωσης και δείκτη πόλωσης σε εξοπλισμό υψηλής τάσης.

#### Τμήμα Β-ΙΙΙ/3

Οδηγίες όσον αφορά την πιστοποίηση πρώτων μηχανικών και δεύτερων μηχανικών πλοίων που κινούνται από κύρια μηχανή ισχύος πρόωσης μεταξύ 250 και 3000 KW

(Δεν υπάρχουν διατάξεις)

#### Τμήμα Β-ΙΙΙ/4

Οδηγίες όσον αφορά την εκπαίδευση και πιστοποίηση μελών του πληρώματος που αποτελούν τμήμα φυλακής μηχανής σε επανδρωμένο μηχανοστάσιο ή έχουν ορισθεί να εκτελούν καθήκοντα σε περιοδικά μη επανδρωμένο μηχανοστάσιο

1 Εκτός των απαιτήσεων που παρατίθενται στο τμήμα Α-ΙΙΙ/4 αυτού του Κώδικα, τα Συμβαλλόμενα Μέρη παροτρύνονται για λόγους ασφαλείας να περιλαμβάνουν τα παρακάτω θέματα στην εκπαίδευση των μελών του πληρώματος που αποτελούν τμήμα φυλακής μηχανής.

- .1 Βασική γνώση των συνηθισμένων εργασιών άντλησης, όπως σεντινών, έρματος και φορτίου,
- .2 Βασική γνώση των ηλεκτρικών εγκαταστάσεων και των σχετικών κινδύνων,
- .3 Βασική γνώση συντήρησης και επσκευών μηχανημάτων και εργαλείων που χρησιμοποιούνται στο μηχανοστάσιο, και
- .4 Βασική γνώση στα βασίας και διαδικασιών μεταφοράς εφοδίων στο πλοίο.

Τμήμα Β-ΙΙΙ/5

Οδηγίες που αφορούν την πιστοποίηση μελών του πληρώματος ως προσοντούχος ναυτικός μηχανής

Εκπαίδευση στο πλοίο πρέπει να σταχειοθετείται εγγράφως σε εγκεκριμένο εγχειρίδιο εκπαίδευσης.

Τμήμα Β- ΙΙΙ/6

Οδηγίες σχετικά με την εκπαίδευση και την πιστοποίηση ηλεκτροτεχνικών αξιωματικών

Εκτός των απαιτήσεων που παρατίθενται στον πίνακα Α-ΙΙΙ/6 αυτού του Κώδικα, τα Συμβαλλόμενα Μέρη παρατρύνονται να λάβουν υπόψη την απόφαση Α. 702 (17) που αφορά τις οδηγίες τήρησης ασυρμάτου για το Παγκόσμιο Θαλάσσιο Σύστημα Κινδύνου και Ασφάλειας ( GMDSS) μέσα στα πλαίσια προγραμμάτων εκπαίδευσης.

Τμήμα Β-ΙΙΙ/7

Οδηγίες που αφορούν την εκπαίδευση και την πιστοποίηση ηλεκτροτεχνικών μελών πληρώματος

(Δεν υπάρχουν διατάξεις)

#### ΚΕΦΑΛΑΙΟ ΙΥ

−Οδηγίες όσον αφορά τες ραδιοεπικαινωνίες και το προσωπικό ραδιοεπικαινωνιών

Τμήμα Β-ΙV/1

Οδηγίες όσον αφορά την εφαρμογή του Κεφαλαίου ΙV.

(Δεν υπάρχουν διατάξεις)

Τμήμα Β-ΙV/2

Οδηγίες όσον αφορά την εκπαίδευση και πιστοποίηση προσωπικού του GMDSS.

# ΕΚΠΑΙΔΕΥΣΗ ΠΟΥ ΣΧΕΤΙΖΕΤΑΙ ΜΕ ΤΟ ΠΙΣΤΟΠΟΙΗΤΙΚΌ ΡΑΔΙΟΗΛΕΚΤΡΟΝΙΚΟΎ ΠΡΩΤΗΣ ΤΑΞΗΣ

#### Γενι κά

- 1 Οι απαιτήσεις ιατρικής καταλληλότητας, ιδιαίτερα όσον αφορά την ακοή, όραση και ομιλία πρέπει να ικανοποιούνται από τον υποψήφιο πριν από την έναρξη της εκπαίδευσης.
- 2 Η εκπαίδευση πρέπει να είναι σχετική με τις διατάξεις της Σύμβασης STCW, τις διατάξεις του Κανονισμού Ραδιοεπικανωνιών που αποτελούν παράρτημα της Διεθνούς Σύμβασης Ραδιοεπικανωνιών και τις διατάξεις της Διεθνούς Σύμβασης για την Ασφάλεια της Ανθρώπινης Ζωής στη θάλασσα (SOLAS) που ισχύει, με ιδιαίτερη έμφαση στις διατάξεις του Παγκόσμιου Θαλάσσιου Συστήματος Κινδύνου και Ασφάλειας

(GMDSS). Κατά την ανάπτυξη απαιτήσεων εκπαίδευσης, πρέπει να λαμβάνονται υπόψη τουλάχιστον α γνώσεις και εκπαίδευση που παραιτίθεται στις παραγράφους 3 έως 14 παρακάτω.

#### Θεωρία

- 3 Γνώση των γενικών αρχών και βασικών παραγόντων που είναι απαραίτητες για την ασφαλή και αποδοτική χρήση όλων των υποσυστημάτων και εξοπλισμού που απαιτείται στο GMDSS σε επαρκή βαθμό για να υποστηρίζονται οι απαιτήσεις πρακτικής εκπαίδευσης που δίνονται στην παράγραφο 13.
- 4 Γνώση της χρήσης λειτουργίας και υποπεριοχών των υποσυστημάτων του GMDSS, περιλαμβανομένων των χαρακτηριστικών των δορυφορικών συστημάτων, των συστημάτων μετάδοσης πληροφοριών ναυτικής ασφαλείας και επιλογής των καταλλήλων τηλεπικανωνιακών δικτύων.
- 5 Γνώση των αρχών ηλεκτρισμού και της θεωρίας ραδιοεπικανωνιών και ηλεκτρονικών σε επαρκές επίπεδο για να πληρούνται αι οδηγίες που παρατίθενται στις παραγράφους 6 έως 10 παρακάτω.
- 6 Θεωρητική γνώση του εξοπλισμού ραδιοεπικανωνιών GMDSS περιλαμβανομένης της τηλεγραφίας περιορισμένου εύρους άμεσης εκτύπωσης και πομπών και δεκτών ραδιοτηλεφωνίας, εξοπλισμού ψηφιακής επιλεκτικής κλήσης, επίγειων σταθμών πλοίου, Ραδιοφάρων ένδειξης θέσης κινδύνου, διατάξεων ναυτικών κεραιών, ραδιοεξοπλισμού σωστικών μέσων μαζί με όλα τα βοηθητικά υποσυστήματα, περιλαμβανομένων των διατάξεων παροχής ισχύος, καθώς επίσης γενικές γνώσεις των αρχών άλλου εξοπλισμού που γενικά χρησιμοπαείται για τη ραδιοναυτιλία με ιδιαίτερη αναφορά στη συντήρηση του εν χρήσει εξοπλισμού.
- 7 Γνώση των παραγόντων που επηρεάζουν την αξιοπιστία του συστήματος, τη διαθεσιμότητα, και διαδικασίες συντήρησης και σωστή χρήση Των συσκευών ελέγχου.
- 8 Γνώση των μικροεπεξεργαστών και ανίχνευση σφαλμάτων σε συστήματα χρησιμοποιώντας μικροεπεξεργαστές..
- 9 Γνώση των διατάξεων ελέγχου που χρησιμοποιούνται στον ραδιοεξοπλισμό GMDSS περιλαμβανομένων δοκιμών και ανάλυσης.
- 10 Γνώση της χρήσης λογισμικού που χρησιμοποιείται στον ραδιοεξοπλισμό GMDSS και μέθοδα αποκατάστασης σφαλμάτων που προκαλούνται από την απώλεια ελέγχου του λογισμικού του εξοπλισμού.

#### Κανονισμοί και έγγραφα

- 11. Γνώση των:
  - .1 Της σύμβασης SOLAS και των Κανονισμών Ραδιοεπικοινωνιών με ιδιαίτερη έμφαση σε :
    - .1.1 Ραδιοεπικαινωνίες κίνδύνου, επείγοντος και ασφαλείας,
    - .1.2 Αποφυγή επιβλαβών παρεμβολών, ιδιαίτερα με την κυκλοφορία ανάγκης και ασφαλείας, και
    - .1.3 Αποφυγή αντικανονικών εκπομπών.
  - .2 Αλλα έγγραφα που σχετίζονται με τις λειτουργικές διαδικασίες και τρόπους επικανωνίων κινδύνου, ασφαλείας και εμπορικής ανταπόκρισης, περιλαμβανομένων των τρόπων χρέωσης, ναυσιπλοϊκών προειδοπαίστων και μετεορολογικών δελτίων στη Κινητή Ναυτική Υπηρεσία και στην Κινητή Ναυτική Δορυφορική Υπηρεσία, και
  - .3 Χρήση του Διεθνούς Κώδικα Σημάτων και του πρότυπου Ναυπλιακού λεβλογίου όπως αντικαταστάθηκε από τις Τυποποιημένες Φράσεις Ναυτικών Επικαινωνιών του ΙΜΟ.

#### Τήρηση Φυλακής και διαδικασίες

- 12 Γνώση και εκπαίδευση σε :
  - .1 Διαδικασίες επικοινωνιών και πρόληψης επιβλαβών παρεμβολών στα υποσυστήματα GMDSS,
  - .2 Διαδικασίες χρήσης των πληροφοριών εκτίμησης συνθηκών διάδοσης για επιλογή των καταλλήλων συχνοτήτων ραδισεπικαινωνιών,

- .3 Φυλακή ραδιοεπικανωνιών με όλα τα υποσυστήματα GMDSS, εκπομπή και λήψη ραδιομηνυμάτων, ιδιαίτερα σε ότι αφορά διαδικασίες κινδύνου, επείγοντος και ασφαλείας και τήρηση ημερολογίου,
- .4 Χρήση του διεθνούς φωνητικού αλφαβήτου,
- .5 Παρακολούθηση συχνοτήτων κινδύνου ενώ συγχρόνως γίνεται παρακολούθηση ή εργασία σε μία τουλάχιστον άλλη συχνότητα,
- .6 Συστήματα αναφοράς πλοίων και διαδικασίες,
- .7 Τηλεπικανωνιακές διαδικασίες του Διεθνούς Εγχειριδίου Αεροναυτικής και Θαλάσσιας Έρευνας και Διάσωσης (IAMSAR),
- .8 Ραδιο-Ιατρικά συστήματα και διαδικασίες, ΚΑΙ
- .9 Αίπα των ψευδών συναγερμών κινδύνου και μέσα αποφυγής τους\*.

#### Πρακτική

- 13 Πρακτική εκπαίδευση που υποστηρίζεται από κατάλληλη εργασία σε εργαστήριο, πρέπει να γίνεται σε :
  - .1 Σωστή και αποδοτική λειτουργία όλων των υποσυστημάτων GMDSS και εξοπλισμού κάτω από κανονικές συνθήκες μετάδοσης και τυπικές συνθήκες παρεμβολών,
  - .2 Ασφαλή λειτουργία όλου του εξοπλισμού επικανωνιών του GMDSS και βοηθητικών συσκευών περιλαμβανομένων των προληπτικών μέτρων ασφαλείας,
  - .3 Επαρκείς και ακριβείς δεβιότητες πληκτρολόγίου για την ασφαλή ανταλλαγή επικανωνιών,
  - .4 Επιχειρησιακές τεχνικές για:
    - .4.1 Ρύθμιση δέκτου και πομπού για τον κατάλληλο τρόπο λειτουργίας περιλαμβανομένης της ψηφιακής επιλογικής κλήσης και τηλεγραφίας άμεσης εκτύπωσης,
    - .4.2 Ρύθμιση κεραίας και επαναπροσανατολισμός, κατά περίπτωση,
    - .4.3 Χρήση ραδιοσυσκευών διάσωσης, και
    - .4.4 Χρήση των Ραδιοφάρων ένδειξης θέσης κινδύνου (EPIRBs).
  - .5 Τοποθέτηση κεραίας, επισκευή και συντήρηση κατά περίπτωση,
  - .6 Ανάγνωση και κατανόηση εικόνων, λογικών και ηλεκτρονικών διαγραμμάτων,
  - .7 Χρήση και φροντίδα εκείνων των εργαλείων και οργάνων δοκιμών που είναι απαραίτητα για να εκτελεσθεί εν πλω ηλεκτρονική συντήρηση,
  - .8 Τεχνικές συγκόλλησης και αποκόλλησης με το χέρι, περιλαμβανομένων εκείνων που γίνονται σε ημιαγωγούς και σύγχρονα κυκλώματα και η ικανότητα για κόλημα ή ξεκόλημα με το χέρι,
  - .9 Ανίχνευση και επισκευή βλαβών σε επίπεδο εξαρτήματος όπου είναι πρακτικά δυνατόν, και σε επίπεδο πλακέτας ή μονάδας σε άλλες περιπτώσεις,
  - .10 Αναγνώριση και διόρθωση των καταστάσεων που συμβάλλουν στην πρόκληση βλαβών,
  - .11 Διαδικασίες συντήρησης, τόσο προληπτικές όσο και διορθωτικές για εξοπλισμό επικανωνιών GMDSS και εξοπλισμό ραδιοναυτιλίας, και
  - .12 Μέθοδα μείωσης της ηλεκτρικής και ηλεκτρομαγνητικής παρεμβολής όπως παρεμπόδιση, μόνωση και διάχυση.

Βλέπε COM/Circ.127 – Οδηγίες αποφυγής ψευδών συναγερμών κινδύνου.

#### Δι άφορα

- 14 Γνώση κα/ ή εκπαίδευση σε :
  - .1 Στην Αγγλική γλώσσα τόσο εγγράφως όσο και προφορικώς, για την ικανοποιητική ανταλλαγή επικανωνιών που είναι σχετικές με την ασφάλεια της ζωής στη θάλασσα,
  - .2 Παγκόσμια γεωγραφία, ιδιαίτερα τις κύριες ναυτοπλοϊκές διόδους, υπηρεσίες των κέντρων συντονισμού διάσωσης και τις σχετικές διόδους επικανωνιών,
  - .3 Επιβίωση στη θάλασσα, ο χειρισμός των σωσίβιων λέμβων,λέμβων διάσωσης, σωσίβιων σχεδιών, πλευστών συσκευών και του εξοπλισμού τους, με εδιαίτερη αναφορά στις ραδιοσυσκευές διάσωσης,
  - .4 Πρόληψη πυρκαγιάς και πυρόσβεση με ιδιαίτερη αναφορά σε ραδιοεγκαταστάσεις,
  - .5 Προληπτικά μέτρα για την ασφάλεια του πλοίου και του προσωπικού σε συνδυασμό με τους κινδύνους που σχετίζονται με τον ραδιοεξοπλισμό, περιλαμβανομένων ηλεκτρικών, ακτινοβολίας χημικών και μηχανικών κινδύνων,
  - .6 Πρώτες βοήθειες περιλαμβανομένες τεχνικές ανάκαμψης αναπνοής –καρδιάς, και
  - .7 ἄεθνής χρόνος (U.T.C) παγκόσμες ζώνες χρόνου και διεθνής γραμμή ημερομηνίας.

## ΕΚΠΑΙΔΕΥΣΗ ΣΧΕΤΙΚΉ ΜΕ ΤΟ ΠΙΣΤΟΠΟΙΗΤΙΚΌ ΡΑΔΙΟΗΛΕΚΤΡΟΝΙΚΟΎ ΔΕΥΤΕΡΑΣ ΤΑΞΕΏΣ

#### Γενι κά

- 15 Προτού αρχίσει η εκπαίδευση ο υποψήφιος πρέπει να ανταποκρίνεται στις απαιτήσεις Ιατρικής καταλληλότητας, ιδιαίτερα όσον αφορά την ακοή, όραση και ομιλία.
- 16 Η εκπαίδευση πρέπει να είναι σχετική με τις διατάξεις της Σύμβασης STCW και της Σύμβασης SOLAS που ισχύει, με ιδιαίτερη έμφαση στις διατάξεις του GMDSS. Κατά την εκπόνηση των απαιτήσεων εκπαίδευσης, πρέπει να λαμβάνονται υπόψη τουλάχιστον οι γνώσεις και εκπαίδευση που παρατίθετναι στις παραγράφους 17 έως 28 παρακάτω\*:

#### Θεωρία

- 17 Γνώση των γενικών αρχών και βασικών παραγόντων που είναι απαραίτητες για την ασφαλή και αποδοτική χρήση όλων των υποσυστημάτων και εξοπλισμού που απαιτείται από το GMDSS σε επαρκή βαθμό για να υποστηρίξει τις απαιτήσεις Πρακτικής Εκπαίδευσης που παρατίθενται στην παράγραφο 27.
- 18 Γνώση της χρήσης λειτουργί<u>ας των υποσυστημάτων του GMDSS όλων των υποπεριοχών, περιλαμβανομένων των χαρακτηριστικών των δορυφορικών συστημάτων, συστημάτων ναυσιπλοϊκών και μετεωρολογικών προειδοποιήσεων και επιλογή των καταλλήλων δικτύων επίκοινωνιών.</u>
- 19 Επαρκής γνώση των αρχών της ηλεκτρολογίας και της θεωρίας ραδιοεπικανωνιών και ηλεκτρονικών ώστε να ανταποκρίνεται στις διατάξεις που παρατίθενται στις παραγράφους 20 έως 24 παρακάτω.
- 20 Γενικές θεωρητικές γνώσεις του εξοπλισμού ραδιοεπικανωνιών στο GMDSS, περιλαμβανομένων τηλεγραφίας στενού εύρους άμεσης εκτύπωσης, πομπών και δεκτών ραδιοτηλεφωνίας, εξοπλισμού ψηφιακής επιλογικής κλήσης, επιγείων σταθμών πλοίου, ραδιοφάρων ένδειξης θέσης κινδύνου, ραδιοσυσκευών σωστικών μέσων με όλα τα βοηθητικά μέσα, περιλαμβανομένωντων διατάξεων ηλεκτρικής παροχής, καθώς επίσης γενικές γνώσεις του εξοπλισμού που γενικά χρησιμοπαιείται για ραδιονουσιπλοΐα, με ιδιαίτερη αναφορά στη συντήρηση του εν χρήσει εξοπλισμού.
- 21 Γενικές γνώσεις των παραγόντων που επιδρούν στην αξιοπιστία, διαθεσιμότητα, διαδικασίες συντήρησης του συστήματος και σωστής χρήσης του εξοπλισμού δοκιμών.
- 22 Γενικές γνώσεις των μικροεπεξεργαστών και διάγνωση σφαλμάτων στα συστήματα που χρησιμοπαιούν μικροεπεξεργαστές.

Οι σχετικές πρότυπες σαρές εκποίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταμασία των εκπαιδεύσεων

- 23 Γενικές γνώσεις συστημάτων ελέγχου στον ραδιοεξοπλισμό του GMDSS περιλαμβανομένων ελέγχου και ανάλυσης
- 24 Γνώση της χρήσης λογισμικού του ραδιοεξοπλισμού GMDSS και μεθόδων αποκατάστασης σφαλμάτων που προκαλούνται από απώλεια ελέγχου του λογισμικού του εξοπλισμού.

#### Κανονισμοί και έγγραφα

#### 25 Γνώση:

- .1 της σύμβασης SOLAS και του Κανονισμού Ραδιοεπικανωνιών με ιδιαίτερη έμφαση σε:
  - .1.1 Ραδιοεπικανωνίες κινδύνου, επείγοντος και ασφαλείας,
  - .1.2 Αποφυγή επιβλαβών παρεμβολών, ιδιαίτερα στις επικοινωνίες κινδύνου και ασφαλείας, και
  - .1.3 αποφυγή αντικανονικών εκπομπών.
- .2 άλλων εγγράφων που είναι σχετικά με τις επιχειρησιακές διαδικασίες και τις διαδικασίες επικανωνών κυνδύνου, ασφάλειας και εμπορικών επικανωνών, περιλαμβανομένων των χρεώσεων, ναυσιπλοϊκών προειδοπαιήσεων και μετάδοσης μετεωρολογικών δελτίων στη Κινητή Ναυτική Υπηρεσία και στην Κινητή Δορυφορική Ναυτική Υπηρεσία, και
- .3 χρήσης του Διεθνούς Κώδικα Σημάτων και του Προτύπου Ναυτικού Ναυτιλιακού λεξιλογίου όπως αντικαταστάθηκε από τις Πρότυπες Φράσεις Ναυτικών Επικαινωνιών του ΙΜΟ.

# Τήρηση φυλακής και ἄαἃ κασίες

26 Πρέπει να παρέχεται εκπαίδευση σε :

- .1 Διαδικασίες επικανωνιών και πειθαρχία για να προληφθούν επιβλαβείς παρεμβολές στα υποσυστήματα GMDSS,
- .2 Διαδικασίες για τη χρήση πληροφοριών διάδοσης ραδιοκυμάτων προκειμένου επιλέγονται οι κατάλληλες συχνότητες επικανωνιών,
- .3 Τήρηση φυλακής ραδιοετικοινωνιών με όλα τα υποσυστήματα του GMDSS, αποστολή και λήψη μηνυμάτων, ιδιαίτερα όσον αφορά επικοινωνίες κινδυνου, επείγοντος και ασφαλείας και τήρηση ημερολογίου,
- .4 Χρήση των φωνητικού αλφαβήτου,
- .5 Παρακολούθηση συχνότητας κινδύνου ενώ συγχρόνως γίνεται παρακολούθηση ή εργασίες σε τουλάχιστον μία άλλη συχνότητα,
- .6 Συστήματα αναφοράς πλοίων και διαδικασίες,
- .7 Τηλεπικανωνιακές διαδικασίες σύμφωνα με το Εγχειρίδιο Ερευνας και Διάσωσης εμπορκών πλοίων του IMO (MERSAR),
- .8 Σύστημα ραδιαιατρικής και διαδικασίες, και
- .9 Αίπα ψευδών συναγερμών κινδύνου και μέσα αποφυγής τους\*.

#### Πρακτική

27 Η πρακτική εκπαίδευση, που υποστηρίζεται αυτό κατάλληλη εργαστηριακή εργασία, πρέπει να παρέχεται σε:

- .1 Ορθό και αποδοτικό χειρισμό όλων των υποσυστημάτων GMDSS και εξοπλισμού κάτω από κανονικές συνθήκες διάδοσης και κάτω από τυπικές συνθήκες παρεμβολών,
- .2 Ασφαλή χειρισμό όλου του εξοπλισμού επικοινωνιών του GMDSS και βοηθητικών συσκευών περιλαμβανομένων των απαιτουμένων μέτρων ασφαλείας,
- .3 Επαρκείς και ακριβείς δεξιότητες πληκτρολογίου για την ικανοποιητική ανταλλαγη πληροφοριών,,
- .4 Επιχειρησιακές τεχνικές για:
  - .4.1 Ρύθμιση δέκτου και πομπού για την κατάλληλη τάξη εκπομπής περιλαμβανομένης της ψηφιακής επιλογικής κλήσης και τηλεγραφίας άμεσης εκτύπωσης,
  - .4.2 Ρύθμιση κεραίας και επαναπροσανατολισμός, κατά περίπτωση,
  - .4.3 Χρήση ραδιοσυσκευών διάσωσης, και
  - .4.4 Χρήση των ραδιοφάρων ένδειξης θέσης κινδύνου,
- .5 Τοποθέτηση κεραίας, επισκευή και συντήρηση κατά περίπτωση,
- .6 Ανάγνωση και κατανόηση εκονικών λογικών και διαγραμμάτων συνδεαμολογίας βαθμίδων,
- .7 Χρήση και φροντίδα εκείνων των εργαλείων και οργάνων δοκιμών που είναι απαραίτητα για να πραγματοπαηθεί εν πλω συντήρηση σε επίπεδο μονάδας ή αντικατάσταση βαθμίδας,
- .8 Βασική συγκόλληση και αποκόλληση με το χέρι και οι περιορισμοί τους,
- .9. Εντοπισμός και επισκευή ελαττωμάτων σε επίπεδο πλακέτας ή βαθμίδας,
- .10 Αναγνώριση και διόρθωση των συνθηκών που συμβάλλουν στην δημιουργία βλαβών,
- .11. Βασικές διαδικασίες συντήρησης, τόσο προληπτικών όσο και διορθωτικών, για όλο τον εξοπλισμό επικανωνιών GMDSS και εξοπλισμό ραδιοναμαπλοΐας, και
- .12. Μέθοδα μείωσης της ηλεκτρικής και ηλεκτρομαγνητικής παρεμβολής όπως παρεμπόδιση, μόνωση και διάχυση.

#### Δι άφορα

- 28 Γνώση των ή/ και εκπαίδεση σε:
  - 1 Αγγλική γλώσσα, τόσο γραπτή όσο και προφορική για την ικανοποιητική ανταλλαγή πληροφοριών που είναι σχετικές με την ασφάλεια της ζωής στη θάλασσα,
  - .2 Παγκόσμια γεωγραφία ιδιαίτερα των κύριων ναυτικών οδών, υπηρεσιών κέντρων συντονισμού ερεύνης και των σχετικών τηλεπικανωνιακών διοδεύσεων,
  - .3 Επιβίωση στη θάλασσα, λειτουργία των σωσσίβιων λέμβων, λέμβων διάσωσης, πνευστών σχεδών, συσκευών που επιπλέουν και του εξοπλισμού τους με ιδιαίτερη αναφορά στις ραδιοεπικοινωνισκές συσκευές,
  - .4 Πρόληψη πυρκαγιάς και πυρόσβεση μετδιαίτερη αναφορά σε εγκατάσταση ραδιοεπικαινωνών,
  - .5 Προληπτικά μέτρα για την ασφάλεια του πλοίου και προσωπικού σε συνδυασμό με τους κινδύνους που έχουν σχέση με τον εξοπλισμό ραδισεπικοινωνιών, περιλαμβανομένων ηλεκτρικών, εξ ακτινοβολίας ηλεκτρικών και μηχανικών κινδύνων,
  - .6 Πρώτες βοήθειες περιλαμβανομένου της τεχνικής καρδιακής αναπνευστικής ανάκαμψης, και
  - .7 Παγκόσμιος χρόνος (UTC), παγκόσμιες ζώνες χρόνου και διεθνής γραμμή ημερομηνίας.

# ΕΚΠΑΙΔΕΥΣΗ ΣΧΕΤΙΚΗ ΜΕ ΤΟ ΓΕΝΙΚΟ ΠΙΣΤΟΠΟΙΗΤΙΚΟ ΧΕΙΡΙΣΤΟΥ

#### Γενικά

29 Ο υποψήφιος πρέπει να ανταποκρίνεται στις απαιτήσεις όσον αφορά την ιατρική καταλληλότητα ιδιαίτερα στην ακοή, την όραση και το λόγο πριν αρχίσει η εκπαίδευση.

30 Η εκπαίδευση πρέπει να είναι σχετική με τις διατάξεις της Σύμβασης STCW, τους Κανονισμούς Ραδιοεπικοινωνιών και τη σύμβαση SOLAS που ισχύει, με ιδιαίτερη έμφαση στις διατάξεις του GMDSS. Κατά την ανάπτυξη των απαιτήσεων εκπαίδευσης πρέπει να λαμβάνονται υπόψη τουλάχιστον οι γνώσεις των παραγράφων 31 έως 36 που παρακάτω παρατίθενται.

### Θεωρία

- 31 Γνώση των γενικών αρχών και βασικών παραγόντων που είναι απαραίτητες για την ασφαλή και αποδοπκή χρήση όλων των υποσυστημάτων και εξοπλισμού που απαιτείται στο GMDSS σε βαθμό επαρκή για να υποστηρίξει τις απαιτήσεις πρακτικής εκπαίδευσης που παρατίθενται στη παράγραφο 35.
- 32 Γνώση της χρήσης λειτουργίας και υπηρέτησης των υποσυστημάτων GMDSS περιλαμβανομένων των χαρακτηριστικών των δορυφορικών συστημάτων, των συστημάτων ναυσιπλοϊκών και μετεωρολογικών προειδοπαήσεων και επιλογή των καταλλήλων δικτύων επικανωνιών.

## Κανονισμοί και έγγραφα

### 33 Γνώση:

- .1 Της σύμβασης SOLAS με ιδιαίτερη έμφαση στους Κανονισμούς Ραδιοεπικοινωνιών όσον αφορά:
  - .1.1 Ραδιοεπικανωνίες κινδύνου, επείγοντος και ασφάλειας,
  - .1.2 Αποφυγή επιβλαβούς παρεμβολής, ιδιαίτερα όσον αφορά τις επικανωνίες κινδύνου και ασφάλειας, και
  - .1.3 Πρόληψη ανεπιθυμήτων εκπομπών.
- .2 Άλλων εγγράφων σχετικά με τις επιχειρησιακές και επικαινωνιακές διαδικασίες για κίνδυνο, ασφάλεια και εμπορικές επικαινωνίες, περιλαμβανομένων των χρεώσεων, ναυσπλαικών προειδοπαιήσεων και μετεωρολογικών εκπομπών στη Ναυτική Κινητή Υπηρεσία και στη Δορυφορική Ναυτική Κινητή Υπηρεσία, και
- .3 Χρήσης του Διεθνούς Κώδικα Σημάτων και του πρότυπου Ναυτικού Ναυτιλιακού Λεβλογίου όπως αντεκαταστάθηκε από τις Πρότυπες Φράσεις Ναυτικής Επικανωνία του ΙΜΟ.

# Τήρηση φυλακής κα διαδικασίες

34 Πρέπει να παρέχεται εκπαίδευση σε:

- .1 Διαδικασίες επικοινωνιών και πειθαρχία για να προληφθεί επιβλαβής παρεμβολή σε υποσυστήματα GMDSS,
- .2 Διαδικασίες χρησης πληροφοριών διάδοσης ραδιοκυμάτων για να επιλέγονται οι άριστες συχνότητες ραδιοεπικοινωνιών,
- .3 Τήρηση φυλακής ραδιοεπικανωνιών που είναι σχετική με όλα τα υποσυστήματα GMDSS, ανταλλαγή τηλεπικανωνιακής ανταπόκρισης, ιδιαίτερα όσον αφορά διάδικασίες κινδύνου, επείγοντος και ασφάλειας και τήρηση ημερολογίου,
- .4 Χρήση διεθνούς φωνητικού αλφάβητου,
- .5 Παρακολούθηση συχνότητας κινδύνου με σύγχρονη παρακολούθηση ή εργασία σε τουλάχιστον άλλη μία συχνότητα,

Οι σχεπκές πρότυπες σαρές εκιταίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταιμασία των εκπαιδεύσεων.

- .6 Συστήματα αναφοράς πλοίου και διαδικασίες,
- .7 Διαδικασίες ραδιοεπικαινωνιών του εγχειριδίου έρευνας και διάσωσης εμπορικού πλοίου του IMO (MERSAR),
- .8 Ραδιαιατρικά συστήματα και διαδικασίες, και
- .9 Αίπα ψευδών συναγερμών κινδύνου και μέσα αποφυγής τους\*.

#### Πρακε κή

- 35 Πρακτική εκπαίδευση πρέπα να γίνεται σε:
  - .1 Σωστή και αποδοπκή λειτουργία όλων των υποσυστημάτων GMDSS και εξοπλισμού κάτω από κανονικές συνθήκες διάδοσης και τυπικές συνθήκες παρεμβολών,
  - .2 Ασφαλής λειτουργία όλου του εξοπλισμού επικανωνιών GMDSS και βοηθητικών συσκευών περιλαμβανομένων των μέτρων ασφαλείας,
  - .3 Ακριβείς και επαρκείς δεξιότητες πληκτρολογίου για την ικανοποιητική ανταλλαγή επικοινωνιών, και
  - .4 Επιχειρησιακές τεχνικές για:
    - .4.1 Ρύθμιση δέκτη και πομπού για την κατάλληλη τάξη λειτουργίας περιλαμβανομένης της ψηφακής επιλλογικής κλήσης και τηλεγραφίας αμέσης εκτύπωσης,
    - .4.2 Ρύθμιση κεραίας και εκ νέου προσανατολισμός κατά περίπτωση,
    - .4.3 Χρήση ραδιοσυσκευών διάσωσης, και
    - .4.4 Χρήση ραδιοφάρων ένδειξης θέσης κινδύνου (EPIRBs).

#### Δι άφορα

- 36 Γνώση των, και/ ή Εκπαίδευση σε:
  - .1 Την Αγγλική γλώσσα τόσο γραπτά όσο και προφορικά για την ικανοπαιητική ανταλλαγή επικανωνιών που είναι σχετικές με την ασφάλεια της ζωής στη θάλασσα,
  - .2 Παγκόσμια γεωγραφία, ιδιαίτερα των κύριων οδών ναυσιπλοΐας υπηρεσίες κέντρων συντονισμού διάσωσης και των σχετικών τηλεπικοινωνιακών διοδεύσεων,
  - .3 Επιβίωση στη θάλασσα, λειτουργία σωσσιβίων λέμβων, λέμβων διάσωσης, πνευστών σχεδιών, εππλεουσών συσκευών και του εξοπλισμού τους, με ειδική αναφορά σε ραδιοεπικανωνιακές συσκευές διάσωσης,
  - .4 Πρόληψη πυρκαγιάς και πυρόσβεση μετδιαίτερη αναφορά στην εγκατάσταση ραδιοεπικανωνιών,
  - .5 Προληπτικά μέτρα για την ασφάλεια πλοίου και προσωπικού σε συνδυασμό με τους σχετικούς κνδύνους στον εξοπλισμό ραδιοεπικαινωνίας, περιλαμβανομένων κινδύνων ηλεκτρικών, ακτινοβολίας, χημιών και μηχανικών,
  - .6 Πρώτες βοήθειες περιλαμβανομένου της τεχνικής καρδιακής αναπνευστικής ανάκαμψης, και
  - .7 Παγκόσμιος χρόνος (UTC) παγκόσμιες ζώνες χρόνου και διεθνής γραμμή ημερομηνίας.

<sup>\*</sup> Βλέπε COM/Circ.127 και την απόφαση Α.814(19) της Ολομέλειας του ΙΜΟ -- Οδηγίες για την αποφυγή ψευδών συναγερμών κνδύνου.

# ΕΚΠΑΙΔΕΥΣΗ ΣΧΕΤΙΚΑ ΜΕ ΤΟ ΠΕΡΙΟΡΙΣΜΈΝΟ ΠΙΣΤΟΠΟΙΗΤΙΚΌ ΧΕΙΡΙΣΤΟΥ

#### Γενικά

37 Ο υποψήφιος πρέπει να ανταποκρίνεται στις απαιτήσεις ιατρικής καταλληλότητας ιδιαίτερα όσον αφορά την ακοή, όραση και ομιλία προτού αρχίσει την εκπαίδευση.

38 Η εκπαίδευση πρέπει να είναι σχετική με τις διατάξεις της Σύμβασης STCW και τους Κανονισμούς Ραδιοεπικανωνιών και τη Σύμβαση SOLAS που ισχύει, δίδοντας ιδιαίτερη έμφαση στις διατάξεις για το σύστημα GMDSS. Κατά την ανάπτυξη των οδηγιών εκπαίδευσης πρέπει να λαμβάνονται υπόψη τουλάχιστον οι γνώσεις και η εκπαίδευση που παρατίθενται στις παραγράφους 39 έως 44\*.

### Θεωρία

39 Γνώσεις των γενικών αρχών και βασικών παραγόντων περιλαμβανομένου του περιορισμού εμβελείας VHF και τις επιπτώσεις του ύψους της κεραίας που είναι απαραίτητες για την ασφαλή και αποδοτική χρήση όλων των υποσυστημάτων και εξοπλισμού που απαιτείται σε θαλάσσια περιοχή Α1 του GMDSS, που είναι αναγκαίες για να υποστηρίζουν τις οδηγίες εκπαίδευσης που παρατίθενται στη παράγραφο 43 παρακάτω.

40 Γνώσεις της χρήσης, λειτουργίας και υποπεριοχές GMDSS για τη θαλάσσια περιοχή Α1 των υποσυστημάτων, π.χ. συστήματα προειδοποίησης, ναυσιπλοΐας και καιρού και τα κατάλληλα τηλεπικανωνιακά δίκτυα.

### Κανονισμοί και έγγραφα

#### 41 Γνώση:

- .1 Εκείνων των μερών της Σύμβασης SOLAS και των Κανονισμών Ραδιοεπικανωνιών που είναι σχετικά με την θαλάσσια περιοχή Α1 με ιδιαίτερη έμφαση σε:
  - 1.1 Ραδιοεπικανωνίες κινδύνου, επείγοντος και ασφάλειας,
  - 1.2 Αποφυγή επιβλαβών παρεμβολών ιδιαίτερα σε επικοινωνίες κινδύνου και ασφαλείας, και
  - 1.3 Πρόληψη ανεπιθύμητων εκπομπών.
- .2 Άλλων εγγράων που σχετίζονται με διαδικασίες επιχειρησιακές και επικανωνιών για κίνδυνο, ασφάλεια και εμπορικές επικανωνίες, περιλαμβανομένων χρεώσεων, ναυσιπλοϊκών προειδοποιήσεων και δελτίων καιρού στη Ναυτική Κινητή Υπηρεσία στη Θαλάσσια περιοχή Α1, και
- .3 Χρήσης του Διεθνούς Κώδικα Σημάτων και του Προτύπου Ναυτικού Ναυτιλιακού λεξιλογίου οπως αντεκατεστάθη τις Πρότυπες Φράσεις Ναυτικών Επικανωνιών του ΙΜΟ.

# Τήρηση φυλακής και διαδικασίες

- 42 Πρέπει να παρέχεται εκπαίδευση σε:
  - .1 Διαδικασίες επικαινωνιών και πειθαρχία για πρόληψη επιβλαβών παρεμβολών στα υποσύστηματα GMDSS που χρησιμοποιούνται στη θαλάσσια περιοχή Α1,
  - ,2 Διαδικασίες επικοινωνιών VHF για:
    - .2.1 Τήρηση φυλακής ραδιοεπικοινωνιών, ανταλλαγή τηλεπικοινωνιακής ανταπόκρισης, εδιαίτερα όσον αφορά τις διαδικασίες κινδύνου, επείγοντος και ασφαλείας και τήρηση ημερολογίου,
    - .2.2 Παρακολούθηση συχνότητας κινδύνου και σύγχρονη παρακολούθηση ή εργασία σε μία άλλη τουλάχιστον συχνότητα, και
    - .2.3 Το σύστημα ψηφιακής επιλογικής κλήσης,
  - .3 Χρήση του διεθνούς φωνητικού αλφάβητου,
  - .4 Διαδικασίες και συστήματα αναφοράς πλοίων,

Οι σχετικές πρότυπες σειρές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταιμασία των εκπαιδεύσεων

- .5 Διαδικασίες ραδιοεπικανωνιών VHF του Διεθνούς Εγχειριδίου Αεροναυτικής και Θαλασσιας Έρευνας και Διάσωσης (IAMSAR),
- .6 Ραδιαιατρικά συστήματα και διαδικασίες, και
- .7 Αίπα εσφαλμένων συναγερμών επείγοντος και μέσα αποφυγής τους.

## Πρακτική

- 43 Πρέπει να παρέχεται πρακτική εκπαίδευση σε:
  - .1 Σωστή και αποδοτική λειτουργία των υποσυστημάτων του GMDSS και του εξοπλισμού που απαιτείται για ένα πλοίο που βρίσκεται στη θαλάσσια περιοχή Α1 σε κανονικές συνθήκες διάδοσης και με τυτικές συνθήκες παρεμβολών,
  - .2 Ασφαλής λειτουργία του σχετικού εξοπλισμού τηλεπικανωνιών του GMDSS και βοηθητικών συσκευών περιλαμβανομένων και των προληπτικών μέτρων ασφαλείας και:
  - .3 Επιχειρησιακές τεχνικές για:
    - .3.1 Χρήση του VHF, περιλαμβανομένων της επιλογής διαύλου και ρύθμισης των κυκλωμάτων φίμωσης και τάξης, ανάλογα με τη περίπτωση,
    - .3.2 Χρήση ραδιοσυσκευών διάσωσης,
    - .3.3 Ραδιοφάρα ένδειξης θέσης κινδύνου, και
    - .3.4 Δέκτες ΝΑΥΤΕΧ.

#### Δι άφορα

- 44 Γνώση των και/ ή εκπαίδευση σε:
  - .1 Αγγλική γλώσσα, τόσο γραπτά, όσο και προφορικά για την ικανοποιητική ανταλλαγή επικανωνιών σχετικά με την ασφάλεια της ζωής στη θάλασσα,
  - .2 Υπηρεσίες κέντρων έρευνας και διάσωσης και οι σχετικές τηλεπικονωνιακές διοδεύσεις,
  - .3 Επιβίωση στη θάλασσα, η λειτουργία των σωσσίβιων λέμβων και λέμβων διάσωσης, πνευστών σχεδιών, πλευστών συσκευών και του εξοπλισμού τους, με ειδική αναφορά στις ραδιοσυσκευές διάσωσης.
  - ..4 Πρόληψη πυρκαγιάς και πυρόσβεση με ιδιαίτερη αναφορά στην εγκατάσταση ραδιοετηκανωνιών,...
  - .5 Προληπτικά μέτρα για την ασφάλεια του πλοίου και προσωπικού σε συνδυασμό με κινδύνους που σχετίζονται με τον εξοπλισμό ραδιοεπικοινωνιών, περιλαμβανομένων ηλεκτρικών, ακτινοβολίας, χημικών και μηχανικών κινδύνων, και
  - .6 Πρώτες βοήθειες περιλαμβανομένης της τεχνικής καρδιακής αναπνευστικής ανάκαμψης.

#### ΕΚΠΑΙΔΕΥΣΗ ΣΧΕΤΙΚΉ ΜΕ ΤΗ ΣΥΝΤΗΡΗΣΗ ΤΩΝ ΕΓΚΑΤΑΣΤΑΣΕΩΝ GMDSS ΣΕ ΠΛΟΙΑ

#### Γενικά

- 45 Γίνεται αναφορά στις απαιτήσεις συντήρησης του κανονισμού IV/15 της σύμβασης SOLAS και της απόφασης Α.702 (17) του IMO όσον αφορά τις οδηγίες συντήρησης του ραδιοεξοπλοιμού για το GMDSS που έχει σχέση με τις θαλάσσιες περιοχές Α3 και Α4 που περιλαμβάνει στο Παράρτημά της την παρακάτω διάταξη:
  - "4.2 Το άτομο που ορίζεται να εκτελέσει λειτουργίες ηλεκτρονικής συντήρησης εν πλω θα πρέπει είτε να είναι κάτοχος κατάλληλου πιστοποιητικού όπως καθορίζεται στους Κανονισμούς Ραδιοεπικοινωνιών, όπου απαιτείται ή να έχουν ισοδύναμα προσόντα συντήρησης ηλεκτρονικών στη θάλασσα,

όπως είναι δυνατόν να εγκριθεί από την Αρχή, λαμβάνοντας υπόψη τις συστάσεις του Οργανισμού για την εκπαίδευση τέτα ου προσωτικού".

46 Οι παρακάτω οδηγίες ή ισοδύναμα προσόντα ηλεκτρονικής συντήρησης παρέχονται για χρήση των Αρχών, όπου απατηθεί.

47 Η εκπαίδευση όπως συνιστάται παρακάτω, δεν δίνει το δικαίωμα σε οπαιοδήποτε ο οποίος δεν διαθέτει κατάλληλο πιστοποιητικό χειριστή Ραδιοεπικανωνιών, να χειρίζεται τον ραδιοεξοπλισμό GMDSS.

# Εκπαίδευση συντήρησης που είνα ισοδύναμη με το πιστοπα ητικό Ραδιοηλεκτρονικών πρώτης τάξης.

48 Για τον ορισμό εκπαίδευσης ισοδύναμης με εκείνη του Ραδιοηλεκτρονικού Α τάξης

- .1 Το περιεχόμενο της θεωρίας πρέπει τουλάχιστον να καλύπτει τα θέματα που παρατίθενται στις παραγράφους 3 εως 10,
- .2 Το πρακτικό περιεχόμενο πρέπει να καλύπτει τουλάχιστον τα θέματα που δίνονται στη παράγραφο 13, και
- .3 Οι διάφορες γνώσεις που περιλαμβάνονται θα πρέπει να καλύπτουν τουλάχιστον τα θέματα που δίνονται στη παράγραφο 14.

# Εκπαίδευση συντήρησης που είναι σοδύναμη με το πιστοπαιητικό Ραδιοηλεκτρονικών δευτέρας τάξης

49 Για τον ορισμό εκπαίδευσης ισοδύναμης με εκείνη του Ραδιοηλεκτρονικού Β τάξης:

- .1 Το περιεχόμενο της θεωρίας πρέπει τουλάχιστον να καλύπτει τα θέματα που παρατίθενται στις παραγράφους 17 εώς 24,
- .2 Το πρακτικό περιεχόμενο πρέπει να καλύπτει τουλάχιστον τα θέματα που δίνονται στη παράγραφο 27, και
- 3 Οι διάφορες γνώσεις που περιλαμβάνονται θα πρέπει να καλύπτουν τουλάχιστον τα θέματα που δίνονται στην παράγραφο 28.

#### ΚΕΦΑΛΑΙΟ V

# Οδηγίες αναφορικά με τις απαιτήσεις ειδικής εκπαίδευσης για το προσωπικό συγκεκριμένων τύπων πλοίων

Τμήμα Β-V/1

Οδηγίες αναφορικά με την εκπαίδευση και τα προσόντα προσωπικού δεξαμενοπλοίων

#### Άτομο με άμεση ευθύνη

1 Ο όρος «άτομο με άμεση ευθύνη» όπως χρησιμοπαιείται στις παραγράφους 3 και 5 του κανονισμού V/1-1 και της παραγράφου 3 του κανονισμού V/1-2 σημαίνει ένα άτομο που είναι σε θέση να λαμβάνει αποφάσεις όσον αφορά την φόρτωση, εκφόρτωση, φροντίδα κατά τη μεταφορά, διαχείριση φορτίου, καθαρισμό δεξαμεγών ή άλλες λειτουργίες σχετικές με το φορτίο.

#### ΕΚΠΑΙΔΕΥΣΗ ΕΞΟΙΚΕΙΩΣΗΣ ΓΙΑ ΟΛΟ ΤΟ ΠΡΟΣΩΠΙΚΟ ΔΕΞΑΜΕΝΟΠΛΟΙΩΝ

2 Όλο το προσωπικό δεξαμενοπλοίων θα πρέπει να λαμβάνει εκπαίδευση εξακείωσης στο πλοίο και κατά περίπτωση, στην ξηρά,παν την ανάθεση των καθηκόντων του, που θα παρέχεται από προσοντούχο προσωπικό, έμπειρο στο χειρισμό και τα χαρακτηριστικά φορτίων πετρελαίου, χημικών ή υγραερίου κατά περίπτωση και στις διαδικασίες ασφαλείας που απαιτούνται. Η εκπαίδευση πρέπει να καλύπτει τουλάχιστον τα θέματα που καθορίζονται στις παραγράφους 9 έως 16 παρακάτω:

#### Κανον σμοί

3 Γνώση των κανονισμών και διατάξεων του πλοίου που διέπουν την ασφάλεια του προσωπικού που επιβαίνει σε δεξαμενόπλαιο τόσο στο λιμάνι όσο και εν πλω.

#### Κίνδυνα για την υγεία και προληπτικά μέτρα που πρέπει να λαμβάνονται

4 Κίνδυνος από την επαφή με το δέρμα, εισπνοή και τυχαία κατάποση φορτίου, έλλειψη οξυγόνου, οι επηβλαβείς ιδιότητες των φορτίων που μεταφέρονται, ατυχήματα στο προσωπικό και οι σχετικές ενέργειες, κατάλογος του τι πρέπει να γίνεται και τι να αποφεύγεται.

#### Πρόληψη πυρκαγιάς και πυρόσβεση

5 Ελεγχος καπνίσματος και περιορισμός ψησίματος φαγητών, πηγές ανάφλεξης, πρόληψη πυρκαγιάς και εκρήξεων, μέθοδος πυρόσβεσης, περιγραφή φορητών πυροσβεστήρων και μονίμων εγκαταστάσεων.

#### Πρόληψη ρύπανσης

6 Διαδικασίες που πρέπει να ακολουθούνται προκειμένου να προληφθεί ατμοσφαιρική και θαλάσσια ρύπανση και μέτρα που θα λαμβάνονται σε περίπτωση διαρροής.

## Εξοπλισμός ασφαλείας και η χρήση του

7 Η σωστή χρήση προστάτευτικού ιματισμού και εξοπλισμού, εξοπλιμός διαφυγής και διάσωσης

### Δι αδι κασίες ανάγκης

8 Εξακίωση με διαδικασίες του σχεδίου ανάγκης

#### ΑΠΟΔΕΙΞΗ ΠΡΟΣΟΝΤΩΝ

Ο πλοίαρχος κάθε πετρελαιοφόρου, δεξαμενοπλοίου χημικών και υγραεριοφόρου θα πρέπα να εξασφαλίσα ότι ο κύριος υπεύθυνος αξιωματικός για το φορτίο διαθέτα ανάλογο πιστοποιητικό, που εκδόθηκε ή θεωρήθηκε ή τέθηκε σε ισχύ όπως απαιτείται από τον κανονισμό V/1-1, παράγραφος 3, κανονισμός V/1-1, παράγραφος 5-ή-κανονισμός-V/1-2, παράγραφος 3, όπως ταιριάζα, και διαθέτα επαρκή πρόσφατη πρακτική εμππαρία σε κατάλληλου τύπου δεξαμενόπλοια που να του επιτρέπα να εκτελεί τα καθήκοντα που του ανατίθεντα.

#### ΟΔΗΓΙΈΣ ΣΧΕΤΙΚΑ ΕΓΚΕΚΡΙΜΕΝΗ ΕΚΠΑΙΔΕΥΣΗ ΕΝ ΠΛΩ

#### Γενικά

- 10 Ο σκοπός προσοντούχας υπηρεεσίας στο πλοίο είναι να παρέχει εκπαίδευση και γνώση για την ασφαλή μεταφορά συγκεκριμένων φορτίων δεξαμενοπλοίων.
- 11 Για να πληροί εμπειρία κατάλληλη των καθηκόντων τους στον τύπο δεξαμενοπλοίου που υπηρετούν και που αναφέρεται στον κανονισμό V/1-1, παράγραφος 4.2.2, κανονισμός V/1-1, παράγραφος 6.2.2 και κανονισμός V/1-2, παράγραφος 4.2.2 η εν πλω εκπαίδευση πρέπει να:
  - .1 δίνει έμφαση στην πρακτική εμπειρία και να έχει σχέση με την εργασία του ναυτικού, πχ εκπαίδευση στα τμήματα καταστρώματος και μηχανοστασίου μπορεί να διαφέρει,
  - .2 να είναι υπό την επίβλεψη προσοντούχου και έμπαρου προσωπικού στη διαχείριση, στα χαρακτηριστικά και στις διαδικασίες ασφάλαιας των φορτίων που μεταφέρονται με το πλοίο,

- .3 να είναι στο δεξαμενόπλαιο που μεταφέρει προιόντα σχεπικά με το Πιστοπαιτικό Ικανότητας/ Θεώρηση του δεξαμενοπλοίου που αναζητείται και πρέπει να είναι τέταια ώστε ο εξειδικευμένος εξοπλισμός να τίθεται σε λειτουργία αλλά μπορεί να περνά με έρμα ανάμεσα στα φορτία για τμήμα της περιόδου,
- .4 να συμμετέχει σε τουλάχιστον τρεις επιχειρήσεις φόρτωσεις και εκφόρτωσεις, και\*
- .5 τουλάχιστον να καλύπτει τα θέματα που παρατίθενται στα κριτήρια εκπαίδευσης στο πλοίο παράγραφος 19.
- 12 Το πρόγραμμα εκπαίδευσης στο πλοίο πρέπα με κανένα τρόπο να επηρεάζα την ασφαλή λειτουργία ή πλευσιμότητα του πλοίου.

## Πρόγραμμα εκτιαίδευσης στο πλοίο

- 13 Ο εκπαιδευόμενος πρέπει να είναι πλεονάζον προσωπικό (π.χ ο εκπαιδευόμενος δεν θα έχει άλλα καθήκοντα από εκείνα της ανάληψης εκπαιδευτικού προγράμματος και καθηκόντων έκτακτης ανάγκης).
- 14 Η εταιρεία, η οποία δαιχειρίζεται το πλοίο στο οποία εκτελείται η θαλάσσια υπηρεσία πρέπει να διαχειρίζεται και συντονίζει, το πρόγραμμα εκπαίδευσης στο πλοίο και να καθορίζει το πλοίο ως εκπαίδευπκό πλοίο\*.
- 15 Πάντοτε, ο εκπαιδευόμενος πρέπει να είναι ενημερωμένος για τα δυο άτομα που είναι άμεσα υπεύθυνα για τη διαχέιριση του προγράμματος εκπαίσδευσης στο πλοίο. Το πρώτο από αυτά τα άτομα είναι ένας προσοντούχος ναυτικός, που αναφέρεται ως «αξιωματικός εκπαίδευσης στο πλοίο», ο οποίος μετά από εντολή του πλοιάρχου, πρέπει να οργανώνει και επιβλέπει το πρόγραμμα εκπαίδευσης. Το δεύτερο άτομο πρέπει να είναι ορισμένο από την εταιρεία, αναφέρεται ως «αξιωματικός εκπαίδευσης εταιρείας», ο οποίος πρέπει να έχει την γενική ευθύνη για το εκπαιδευτικό πρόγραμμα και για τον συντονισμό με εκπαιδευτικούς οργανισμούς.
- 16 Ο εκπαιδευόμενος πρέπει να έχει ένα εγκεκριμένο εγχειρίδιο εκπαίδευσης έτσι ώστε να τηρείται μια κατανοητή καταγραφή της πρακτικής εκπαίδευσης και εμπειρίας στη θάλασσα. Το εγκεκριμένο εγχειρίδιο κπαίδευσης πρέπει να παρατίθεται κατά τέταιο τρόπο ώστε να παρέχει λεπτομερείς πληροφορίες σχετικά με τα καθήκοντα προς ανάληψη και την πρόσδο ολοκλήρωσής τους. Κατάλληλα συμπληρωμένο και υπογεγραμμένο από τον πλοίαρχο το εγκεκριμένο ημερολόγιο θα είναι το μοναδικό αποδεικτικό σταιχείο ότι έχει ολοκληρωθεί στο πλοίο ένα δομημένο πρόγραμμα εκπαίδευσης στο πλοίο που οδηγεί στην έκδοση σχετικού Πιστοπαιητικού Προχωρημένης Εκπαίδευσης για Επιχειρήσεις Δεξαμενοπλοίων.
- 17 Κατά τη διάρκεια εγκεκριμένου προγράμματος εκπαίδευσης ο εκπαιδευόμενος πρέπει να εκπαίδευετα στις επιχειρήσεις φόρτωσης, εκφόρτωσης, φροντίδας μεταφοράς, διαχείρισης φορτίου, καθαρισμού δεξαμενής ή άλλων σχετικών με το φορτίο επιχειρήσεις για να εξασφαλίζει ότι η αποκτηθείσα εμπειρία είναι τουλάχιστον ισότιμη με εκείνη που θα είχε αποκτηθεί σε τρείς μήνες κανονική υπηρεσία.
- 18 Εάν δεν μπορούν να επιτευχθούν τα τρία κριτήρια φόρτωσης και εκφόρτωσης μέσα-σε περίοδο-ενός μήνα εκπαίδευσης στο πλοίο, τότε η περίοδος εκπαίδευσης στο πλοίο πρέπει να επεκταθεί έως αυτά τα κριτήρια επιτευχθούν με επιτυχία.

Κα τήρι α εκπαίδευσης στο πλοίο

19 Η εκπαίδεση στο πλοίο πρέπει τουλάχιστον να παρέχει γνώση και εμπειρία, ανάλογη με τον εφαρμόσιμο τύπο δεξαμενοπλοίου, των ακόλουθων:

#### .1 Ασφάλεια

- .1.1 Όλα οι τύπαι δεξαμενοπλοίων
  - .1 Σύστημα διαχείρισης ασφάλειας πλοίου
  - .2 Συγκεκριμένος εξοπλισμός και διαδικασίες πυρόσβεσης φορτίου

Μία επιχείρηση φόρτωσης και εκφόρτωσης θεωρείται η φόρτωση και εκφόρτωση περισσότερου από το 60% της συνολικής χωρηπκότητας της δεξαμενής φορτίου του πλοίου. Φορτώσεις/ εκφορτώσεις μικρότερες ποσότητας, μπορεί να συνυπολογισθούν στο ισόπμο αυτής της ποσότητας.

Ένα καθορισμένο εκπαιδευτικό πλοίο είναι ένα εμπορικό πλοίο ορισμένο από την εταιρεία ότι είναι κατάλληλο για τον σκοπό αυτής της οδηγίας, όπως εφαρμόζετα.

- .3 Συγκεκριμένες διαδικασίες πρώτων βοηθειών φορτίου, περιλαμβανομένου του Οδηγού Ιατρικών Πρώτων Βοηθειών για Χρήση σε Ατυχήματα Επικίνδυνων Φορτίων (MFAG)
- .4 Συγκεκριμένα κίνδυνα πλοίου -/φορτίου , περιλαμβανομένων κανονισμών καπνού, ατμόσφαιρων περιορισμένων οξυγόνου, νάρκωση και τοξικότητα φορτίου υδρογονάνθρακα
- .5 Συστήματα αξιολόγησης κινδύνου
- .6 Άδεια εργασίας, περιλαμβανομένης εργασίας εν θερμώ και διαδικασίας εισόδου σε κλειστούς χώρους
- .7 Χρήση ατομικού προστατευτικού εξοπλισμού

# .1.2 Επιπρόσθετα για υγραεριοφόρα

.1 Κίνδυνοι και προληπτικά μέτρα που έχουν σχέση με τη διαχείριση και στοίβαση φορτίων σε κρυογονική θερμοκρασία

## .2 Κατασκευή, φορτίο, δεξαμενές φορτίου και αντλίες

#### .2.1 Όλα α τύπα δεξαμενοπλοίων

.1 Κατασκευή Κύτους/ δεξαμενής και περιορισμοί

.2 Συνδέσεις φορτίου

- .3 Ιδιότητες κα ικίνδυναι που έχουν σχέση με τους τύπους φορτίου που μεταφέρεται, περιλαμβανομένης της χρήσης Φυλλαδίων Δεδομένων Υλικού Ασφάλειας
- .4 Τους κινδύνους που α επιχειρήσεις φορτίου (όπως καθαρισμός/ ελευθέρωση αερίου/ καθαρισμός δεξαμενής) που μπορεί να δημιουργήσει στα συστήματα εξαέρωσης του χώρου ενδιαίτησης και ενέργειες ελάττωσης αυτών των κινδύνων

.5 Διαμόρφωση φορτίου και συστήματος έρματος

.6 Αντλίες και σχετικός εξοπλισμός

.7 Ειδικός εξοπλισμός που έχει σχέση με τις επιχειρήσεις φορτίου

.8 Λεπτομέρειες κατασκευής δεξαμενοπλοίου και πώς αυτό επηρεάζει τις επιχειρήσεις φορτίου.

## .2.2 Επιπρόσθετα για υγραεριοφόρα

- .1. Χρήση χωρισμού, διαχωρισμού και αεροφραγμάτων για τη διατήρηση της ασφάλειας περιοχών αερίου
- .2 Δεξαμενή φορτίου, διαχωριστικό, χώρα μόνωσης, ανακουφιστικές βαλβίδες και συστήματα εξαέρωσης ατμού

.3 Συμπιεστές ατμού φορτίου και σχετικός εξοπλισμός

#### .3 Διαγωγή και ευστάθεια

- .3.1 Όλα αι τύποι Δεξαμενοπλοίων
  - .1 Πληροφορίες ευστάθειας δεξαμενοπλοίου και εξοπλισμός υπολογιμού

.2 Σημασία τήρησης επιπέδων κινδύνου στα επιτρεπτά όρια

.3 Κίνδυνα επίπτωσης ελεύθερης επιφάνειας και επίπτωσης «πλαφασμού»

#### .4 Επιχαρήσας φορτίου

#### .4.1. Όλα α τύπα δεξαμενοπλοίου

- .1 Προσχεδιασμός φόρτωσης/ φροντίδας διαμετακόμισης, επιχειρήσεων εκφόρτωσης/ ερματισμού
- .2 Τήρηση αρχείων
- .3 Διαδικασίες έναρξης/ παύσης, περιλαμβανομένης διακοπής
- .4 Απαιτείται προσοχή για τις διατάξεις αγκυροβόλησης κατά τη διάρκεια επιχειρήσεων φορτίου

.5 Απαιτήσεις καθαρισμού και αδράνειας και σχετικοί κίνδυνοι

- .6 Φόρτωση φορτίου, περιλαμβανομένων των επιχειρήσεων φόρτωσης έως το επιτρεπόμενο όριο
- .7 Εκφόρτωση φορτίου, περιλαμβανομένων επιχειρήσεων αποστράγγισης και απορρόφησης

.8 Παρακολούθηση φορτίου κατά τη διάρκεια επιχειρήσεων φόρτωσης/εκφόρτωσης, περιλαμβανομένης της λήψης δείγματος, όπου εφαρμόζετα

.9 Μέτρηση δεξαμενής και συστήματα συναγερμού

.10 Κίνδυνοι από ηλεκτροστατική εκφόρτωση και πρόληψή της

.11 Επιχειρήσεις ερματισμού και απομάκρυσης έρματος

.12 Απατήσεις τήρησης, περιλαμβανομένων επιθεωρήσεων επιχρισματών

## .4.2 Εππρόσθετα για χημικά πλοία

1. Πολυμερισμός, συμβατότητα φορτίου, συμβατότητα επιχρίσματος δεξαμενής και άλλες αντιδράσες

2. Λειτουργίες αναστολέων και καταλυτών

3. Διασκόρπιση ατμού / αερίου

# .4.3 Επιπρόσθεται για υγραεριοφόρα

.1 Πολυμερισμός, συμβατότητα φορτίου, συμβατότητα επιχρίσματος δεξαμενής και άλλες αντι-

.2 Λειτουργίες αναστολέων και καταλυτών

.3 Αιτίες αντίθλιψης και επιπτώσεις χαλάρωσης ττίεσης

4 Χρήση αερίου βρασμού ως καύσιμο

.5 Διασκόρπιση ατμού/ αερίου

.6 Επιχειρήσεις καθαρισμού και ψύξης

.7 Επιχείρηση και τήρηση εξοπλισμού επανυγροποίησης

.8 Κατανόηση και χρήση συνήθους συστήματος μεταφοράς

# 4.4 Επιπρόσθετα για πετρελαιοφόρα

.1 Συστήματα πλύσης ακατέργαστου πετρελαίου

# .5 Πλύσι μο/ καθαρι σμός δεξαμενής

- .5.1 Όλοι οι τύποι δεξαμενοπλοίων
  - .1 Συστήματα καθαρισμού δεξαμενής και εξοπλισμός δεξαμενοπλοίου

.2 Προσχεδιασμός επιχειρήσεων πλύσης / καθαρισμού δεξαμενής

.3Διαδικασίες πλύσης δεξαμενής, περιλαμβανομένων καθαρισμό και αδράνεια

4 Έλεγχος υπολειμμάτων /άχρηστων προιόντων

- 5 Ηλεκτροστατικοί κίνδυνα
- .6 Απαιτήσεις καθαριότητας
- .7 Απαιτήσεις τήρησης

#### .5.2 Επιπρόσθετα για χημικά

- .1 Απομάκρυνση αναστολέων και κατάλοιπων
- .2 Χρήση απορρόφησης, καθαριστικών και απορρυπαντικών

# .5.3 Εππρόσθετα για υγραεριοφόρα

.1 Αεριοθέρμανση/ βρασμός υγρών υπολειμμάτων και διεργασία επαναεριοποίησης

# .6 Συστήματα αδρανών αερίων

# .6.1 Όλοι οι τύποι δεξαμενοπλοίων

.1 Συστήματα αδράνειας και εξοπλισμός δεξαμενοπλοίου

.2 Κίνδυνα που έχουν σχέση με την αδράνεια χώρων, με ιδιαίτερη αναφορά στην ασφαλή είσοδο στις δεξαμενές

.3 Καθαρισμός, διατήρησης αδράνειας ατμόσφαιρας και επιχειρήσεις ελευθέρωσης αερίου

.4 Απαιτήσεις τήρησης

# .7 Πρόληψη ρύπανσης και έλεγχος

- .7.1 Όλα α τύπα δεξαμενοπλοίου
  - .1 Διεθνείς, κανονισμοί Κράτους σημαίας και εταιρείας, έγγραφα και σχέδια
  - .2 Λειτουργία συστημάτων πρόληψης ρύπανσης δεξαμενοπλοίου και εξοπλισμός, περιλαμβα-νομένης παρακολούθησης εκφόρτωσης
  - .3 Λειτουργία εξοπλισμού αναχαίτισης ρύπανσης δεξαμενοπλοίου

## .8 Όργανα και εξοπλισμός ανίχνευσης αερίου

- .8.1 Όλα α τύπα δεξαμενοπλοίου
  - .1 Χρήση και βαθμονόμηση ατομικών, φορητών και σταθερών αναλυτών αερίου, με ιδιαίτερη αναφορά στον εξοπλισμό παρακολούθησης οξυγόνου και υδρογονάνθρακα
  - .2 Λειτουργία, διατήρηση και όρια υπολογισμού επιπέδου δεξαμενής φορτίου, συστημάτων υπολογισμού θερμοκρασίας και επιπέδου συναγερμού
- .8.2 Επιπρόσθετα για υγραεριοφόρα
  - .1 Λειτουργία και διατήρηση υπολογισμού θερμοκρασίας κύτους

#### .9 Εκδόσεις

- .9.1 Όλα α τύπα δεξαμενοπλοίου
  - .1 Διεθνείς, εκδόσεις εταιρείας και Κράτους σημαίας σχετικές με την λειτουργία δεξαμενοπλοίου, περιλαμβανομένων των SOLAS, MARPOL και άλλων εφαρμοσμένων εγχειριδίων οδηγιών
  - .2 Συγκεκριμένα εγχαρίδια λατουργίας και διατήρησης εξοπλισμού στο πλοίο
  - .3 Θεσπισμένα εργοστασιακά πρότυπα και κώδικας πρακτικής ασφαλούς εργασίας (τιχ ICS, OCIMF, SIGTTO)

#### Τμήμα Β- V/1-1

Οδηγίες που αφορούν εκπαίδευση και προσόντα πλοιάρχων, αξιωματικών και πληρωμάτων σε πετρελαιοφόρα και χημικά δεξαμενόπλοια

#### ΕΚΠΑΙΔΕΥΣΗ ΔΕΞΑΜΕΝΟΠΛΟΙΩΝ

- 20 Η εκπαίδευση που απαιτείται από τις παραγράφους 2.2 και 4.3 του κανονισμού V/1-1 για πετρελαιοφόρα θα πρέπει να παρατίθεται σε ένα σχέδιο εκπαίδευσης που ευκρινώς εκφράζει, για όλα τα εμπλεκόμενα Συμβαλλόμενα Μέρη, τους στόχους της εκπαίδευσης. Η εκπαίδευση μπορεί να παρέχεται είτε στο πλοίο ή στην ξηρά, όπου ταιράζει. Πρέπει να συμπληρώνεται με πρακτική εκπαίδευση επί του πλοίου και όπου ταιράζει, σε εγκαταστάσεις της ξηράς. Όλη η εκπαίδευση πρέπει να παρέχεται από κατάλληλα προσοντούχο και έμπειρο προσωπικό.
- 21 Θα πρέπει να γίνεται όσο είναι δυνατόν μεγαλύτερη χρήση των επι πλοίου λειτουργιών και εγχειριδίων εξοπλισμού, ται νιών και κατάλληλων οπτικών βοηθημάτων και πρέπει να δίνεται η δυνατότητα εισαγωγής σε συζήτηση του ρόλου που πρόκειται να διαδραματίσει η οργάνωση ασφαλείας σε πλοίο και του ρόλου των αξιωματικών και των επιτροπών ασφαλείας.

#### ΕΚΠΑΙΔΕΥΣΗ ΧΗΜΙΚΩΝ ΔΕΞΑΜΕΝΟΠΛΟΙΩΝ

- 22 Η εκπαίδευση που απαιτείται από τις παραγράφους 2.2 και 6.3 του κανονισμού V/1-1, όσον αφορά τα χημικά δεξαμενόπλοια, θα πρέπει να παρατίθεται σε ένα σχέδιο εκπαίδευσης που ευκρινώς εκφράζει , για όλα τα εμπλεκόμενα Συμβαλλόμενα Μέρη, τους στόχους της εκπαίδευσης. Η εκπαίδευση μπορεί να παρέχεται είτε στο πλοίο ή στην ξηρά, όπου ταιριάζει. Πρέπει να συμπληρώνεται με πρακτική εκπαίδευση επί του πλοίου και όπου ταιριάζει, σε εγκαταστάσεις της ξηράς. Όλη η εκπαίδευση πρέπει να παρέχεται από κατάλληλα προσοντούχο και έμπειρο προσωπικό.
- 23 Θα πρέπει να γίνεται όσο είναι δυνατόν μεγαλύτερη χρήση των επί πλοίου λειτουργιών και εγχειριδίων εξοπλισμού, ταινών και κατάλληλων οπτικών βοηθημάτων και πρέπει να δίνεται η δυνατότητα εισαγωγής σε

Οι σχεπκές πρότυπες σαρές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταμασία των εκπαίδεύσεων

συζήτηση του ρόλου που πρόκειται να διαδραματίσει η οργάνωση ασφαλείας σε πλοίο και του ρόλου των αδιωματικών και των επιτροπών ασφαλείας.

Τμήμα Β-V/1-2

Οδηγίες που αφορούν την εκπαίδευση και τα προσόντα πλοιάρχων, αξιωματικών και πληρωμάτων σε υγραεριοφόρα

24 Η εκπαίδευση που απαιτείται από τις παραγράφους 2.2 και 4.3 του κανονισμού V/1-2, όσον αφορά τα υγραεριοφόρα δεξαμενόπλοια, θα πρέπει να παρατίθεται σε ένα σχέδιο εκπαίδευσης που ευκρινώς εκφράζει, για όλα τα εμπλεκόμενα Συμβαλλόμενα Μέρη, τους στόχους της εκπαίδευσης. Η εκπαίδευση μπορεί να παρέχεται είτε στο πλοίο ή στην ξηρά, όπου ταιριάζει. Πρέπει να συμπληρώνεται με πρακτική εκπαίδευση επί του πλοίου και όπου ταιριάζει, σε εγκαταστάσεις της ξηράς. Όλη η εκπαίδευση πρέπει να παρέχεται από κατάλληλα προσοντούχο και έμπειρο προσωπικό\*.

25 Θα πρέπει να γίνεται όσο είναι δυνατόν μεγαλύτερη χρήση των επι πλοίου λειτουργιών και εγχειριδίων εξοπλισμού, τανιών και κατάλληλων οπτικών βοηθημάτων και πρέπει να δίνεται η δυνατότητα εισαγωγής σε συζήτηση του ρόλου που πρόκειται να διαδραματίσει η οργάνωση ασφαλείας σε πλοίο και του ρόλου των αξιωματικών και των επιτροπών ασφαλείας.

Οδηγίες που αφορούν την εκπαίδευση ναυτικών επιβατηγών πλοίων

# ΕΝΙΣΧΥΜΕΝΗ ΠΥΡΟΣΒΕΣΗ

1 Για αξιωματικούς και πλήρωμα επιβατηγών πλοίων, επιπρόσθετη εκπαίδευση πρέπει να παρέχεται τονίζοντας τις δυσκολίες πυρόσβεσης , περιλαμβάνοντας πρόσβαση σε περιορισμ ενους χώρους και πρόληψη εξάπλωσης πυρός σε γειτονικούς χώρους.

#### ΕΛΕΓΧΟΣ ΖΗΜΙΩΝ

2 Στην ανάπτυξη προτύπων ικανότητας που παρουσιάζονται στα τμήματα Α-ΙΙ/1, Α-ΙΙ/2, Α-ΙΙΙ/2 για την ανάπτυξη απαραίτητου επιπέδου θεωρητικής γνώσης, κατανόησης και κατάρτισης στον έλεγχο ζημιών και υδατοστεγανότητας, εταιρείας και εκπαιδευτικά ιδρύματα πρέπει να λάβουν υπόψη την ελάχιστη γνώση, κατανόηση και επάρκεια για έλεγχο ζημιών και υδατοστεγανότητας όπως παρουσιάζεται παρακάτω:

#### Ικανότητα

Ελαχιστοποίηση κινδύνου πλημμύρας και διατήρηση κατάσταση ετοιμότητας ανταπόκρισης σε καταστάσεις έκτακτης ανάγκης που αφορά ζημιά στην υδατοστεγανότητα του πλοίου.

### Γνώση, κατανόηση και επάρκεια

Σχέδια και οργάνωση ελέγχου ζημιών στο πλοίο

Συστήματα ελέγχου ζημιών, εξοπλισμός (ντουλάπια) και δίοδοι διαφυγής έκτακτης ανάγκης

Τα σταχεία κλειδί διατήρησης ευστάθειας και υδατοστεγανότητας

Σημασία της διασφάλισης πλημμύρας και διατήρησης ορίων υδατοστεγανότητας.

Ενέργειες που πρέπει να γίνονται στο πλοίο σε περίπτωση έκρηξης, προσθαλάσσωσης, σύγκρουσης ή πυρκαγιάς

Τεχνικές ελέγχου ζημιών, συνεπείς με με τον εξοπλισμό που βρίσκεται επί του πλοίου, συμπεριλαμβανομένων των συστημάτων και αντλιών υδροσυλλεκτών.

Τμήμα Β-V/a1

Οδηγίες που αφορούν στην επιπρόσθετη εκπαίδευση για πλοιάρχους και υποπλοιάρχους μεγάλων πλοίων με ασυνήθιστα χαρακτηριστικά ελιγμών.

Σημειώστε ότι δεν υπάρχουν αντίστα χαι κανονισμοί στη Σύμβαση ή στα τμήματα του μέρους Α του Κώδικα για τα τμήματα Β/ V-a, B/ V-b, B/ V-c, B/ V-d, B/ V-e, B/ V-f, ka B/ V-g.

- 1 Είναι σημαντικό ότι οι πλοίαρχοι και υποπλοίαρχοι πρέπει να έχουν την σχετική εμπειρία και εκπαίδευση πριν την ανάληψη καθηκόντων πλοιάρχου ή υποπλοιάρχου μεγάλων πλοίων ή πλοίων που έχουν χαρακτηριστικά ασυνήθιστων ελιγμών και διαχείρισης σημαντικά διαφορετικά από εκείνα στα οποία έχουν υπηρετήσει. Τέτοια χαρακτηριστικά θα βρίσκονται γενικά σε πλοία τα οποία είναι σημαντικού νεκρού βάρους ή μεγέθους ή ειδικού σχεδιασμού ή υψηλής ταχύτητας.
- 2 Πριν το διορισμό τους σε τέταιο πλοίο, πλοίαρχαι και υποπλοίαρχαι πρέπει:
  - .1 να ενημερώνονται για τα χαρακτηριστικά διαχείρισης από την εταιρεία , ιδιαίτερα όσον αφορά την γνώση, κατανόηση και επάρκεια που παρατίθενται κάτω από τους ελιγμούς και διαχείριση πλοίου στην στήλη 2 του πίνακα Α-ΙΙ/2 Καθορισμός του ελάχιστου προτύπου ικανότητας για πλαιάρχους και υποπλαιάρχους πλοίων χωρητικότητας άνω των 500 ο.χ., και
  - .2 να εξαικειώνονται με την χρήση μέσων ναυσιπλοΐας και ελιγμών που βρίσκονται στο πλοίο περιλαμβανομένων των ικανοτήτων τους και των περιορισμών τους.
- 3 Πριν αρχικά αναλάβει την διοίκηση ενός από τα πλοία που αναφέρονται ανωτέρω, ο μελλοντικός πλοίαρχος πρέπει να έχει επαρκή και κατάλληλη γενική εμπειρία ως πλοίαρχος ή υποπλοίαρχος, και είτε:
  - .1 να έχει επαρκή και κατάλληλη εμπειρία ελιγμών του ίδιου πλοίου υπό επίβλεψη ελιγμών πλοίου με τα ίδια χαρακτηριστικά ελιγμών, ή
  - .2 να έχει παρακολουθήσει ένα εγκεκριμένο πρόγραμμα προσομοίωσης διαχείρισης πλοίου σε εγκατάσταση ικανή προσωμοίωσης των χαρακτηριστικών ελιγμών τέτοιου πλοίου\*.
- 4 Η επιπρόσθετη εκπαίδευση και προσόντα πλαιάρχων και υποπλαιάρχων δυναμικά υποστηριζόμενων και ταχύπλοων πρέπει να είναι σύμφωνα με τις σχετικές οδηγίες του Κώδικα ΙΜΟ Ασφάλειας Δυναμικά Υποστηριζόμενων Σκαφών και ΙΜΟ Διεθνών Κωδικών Ασφάλειας Ταχύπλοων Σκαφών (1994 HSC Κώδικας και 2000 HSC Κώδικας), κατά περίπτωση.

#### Τυήμα Β-V/b\*

Οδηγίες που αφορούν την εκπαίδευση αξιωματικών και πληρωμάτων που είναι υπεύθυνοι για την διαχείριση φορτίου πλοίων που μεταφέρουν επικύνδυνες και επιβλαβείς ουσίες σε στερεά μορφή χύδην

1 Η εκπαίδευση πρέπει να διαιρείται σε δυο τμήματα, ένα γενικό τμήμα σχετικά με τις αρχές που εμπλέκονται και ένα μέρος που αφορά την εφαρμογή τέταων αρχών στην λειτουργία του πλοίου. Όλη η εκπάιδευση πρέπει να δίνεται από κατάλληλα προσοντούχο και έμπειρο προσωπικό και να καλύπτει τουλάχιστον τα θέματα των παραγράφων 2 έως 14 ακολούθως.

#### ΑΡΧΕΣ

#### Χαρακτηριστικά και ιδιότητες

2 Τα σημαντικά φυσικά χαρακτηριστικά και χημικές ιδιότητες των επικίνδυνων και επιβλαβών ουσιών που επιτρέπουν βασική κατανόηση των πραγματικών κινδύνων και απειλών.

# Κατάταξη υλικών που έχουν χημικούς εινδύνους

3 Οι κατηγορίες επικίνδυνων αγαθών 4-9 του ΙΜΟ και οι κίνδυνοι που έχουν σχέση με καθε τάξη, και υλικά επιβλαβή μόνο όταν είναι χύδην (ΜΗΒ)που περιγράφονται στον Διεθνή Ναυπλιακό Στερεών Χύδην Φορτίων Κώδικα (IMSBC).

#### Κίνδυνα στην υγεία

4 Κίνδυνα από επαφή με το δέρμα, εσπνοή, κατάπωση και ακπνοβολία.

#### Συμβάσες, κανονισμοί και συστάσες

Ο σχετικές πρότυπες σειρές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταμασία των εκπαιδεύσεων

Σημαώστε όπ δεν υπάρχουν αντίστα χα κανονισμοί στη Σύμβαση ή στα τμήματα του μέρους Α του Κώδικο για τα τμήματα 8/ V-a, B/ V-c, B/ V-d, B/ V-e, B/ V-f, κα B/ V-g.

- 5 Γενική εξαικείωση με τις σχετικές απαιτήσεις των κεφαλαίων ΙΙ-2 και VII της Σύμβασης SOLAS του 1974 όπως τροποπαήθηκε.
- 6 Γενική εξοικείωση με τον Κώδικα ασφαλούς πρακτικής για Στερεά Χύδην Φορτία (Κώδικας IMSBC) με ιδιαίτερη αναφορά:
  - .1 στην ασφάλεια του προσωπικού περιλαμβανομένου του εξοπλισμού ασφαλείας, οργάνων μέτρησης, την χρήση τους και πρακτική εφαρμογή και ερμηνεία των αποτελεσμάτων,
  - .2 κίνδυνος από φορτία που έχουν τη τάση να μετατοπίζονται, και
  - .3 χημικά υλικά που εγκυμονούν κινδύνους.

# ΕΦΑΡΜΟΓΗ ΣΤΟ ΠΛΟΙΟ

# Κατηγορία 4.1 - Εύφλεκτα στερεά

# Κατηγορία 4.2 - Ουσίες που υπόκαντα σε αυτόματη ανάφλεξη

# Κατηγορία 4.3 - Ουσίες που, όταν έλθουν σε επαφή με το νερό, αναδίδουν εύφλεκτα αέρια

7 Μεταφορά, στα βασία και έλεγχος θερμοκρασίας για να προληφθεί διάσπαση και πιθανή έκρηξη, κατηγορίες στο βασίας, γενικές προφυλάξεις στο βασίας περιλαμβανομένων αυτών που εφαρμόζονται σε αυτοαντιδρούσες και σχεπικές ουσίες, απαιτήσεις διαχωρισμού για να προληφθεί θέρμανση και ανάφλεξη, η εκπομπή δηλητηριωδών ή ευφλέκτων αερίων και ο σχηματισμός εκρηκτικών μειγμάτων.

# Κατηγορία 5.1 - Οξα δωμένες ουσίες

8 Μεταφορά, στοιβασία και έλεγχος της θερμοκρασίας για να προληφθεί διάσπαση και πιθανή έκρηξη, κατηγορίες στοιβασίας, γενικά προληπτικά μέτρα στοιβασίας και απαιτήσεις διαχωρισμού για να εξασφαλισθεί διαχωρισμός από καύσιμο υλικό, από οξέα και πηγές θερμότητας για να προληφθεί πυρκαιά, έκρηξη και ο σχηματισμός τοβικών αερίων.

#### Κατηγορία 6.1 - Τοξικές ουσίες

9 Μόλυνση τροφίμων, χώρων εργασίας και ενδιαίτησης και εξαερισμός.

# Κατηγορία 7 – Ραδιενεργά υλικά

10 Δείκτης μεταφοράς, τύπος μεταλλευμάτων και συγκεντρώσεων, στο βασία και διαχωρισμός από άτομα, φωτογραφικό φίλμ που δεν έχει εμφανισθεί και πινάκια και τρόφιμα, κατηγορίες στο βασίας γενικές απαιτήσεις στο βασίας, ειδικές απαιτήσεις στο βασίας, απαιτήσεις διαχωρισμού και αποστάσεις διαχωρισμού, διαχωρισμός από άλλα επικίνδυνα αγαθά.

# Κατηγορία 8 – Διαβρωτικές ουσίες

11 Κίνδυνος από ουσίες που έχουν υγρανθεί.

# Κατηγορία 9 - Διάφορες επικίνδυνες ουσίες και εμπορεύματα

12 Παραδείγματα και οι σχετικές βλάβες, οι βλάβες των υλικών, επιβλαβή μόνο όταν είναι χύδην (MHB), γενικά και ειδικά προληπτικά μέτρα στοιβασίας, προληπτικά μέτρα εργασίας και μεταφοράς, απαιτήσεις διαχωραμού.

# Προληττακά μέτρα ασφαλείας και διαδικασίες έκτακτης ανάγκης

13 Ηλεκτρική ασφάλεια σε χώρους εμπορευμάτων, προληπτικά μέτρα που πρέπει να λαμβάνονται πριν από την είσοδο σε περίκλειστους χώρους που μπορεί να υπάρχει έλλειψη οξυγόνου, δηλητηριώδης ή εύφλεκτη ατμόσφαιρα, α πιθανές επιπτώσεις πυρκαγιάς σε φορτία ουσιών από κάθε κατηγορία, χρήση των Διαδικασιών Ανταπόκρισης Έκτακτης Ανάγκης για πλοία που μεταφέρουν επικίνδυνα αγαθά, σχέδια ανάγκης και διαδικασίες που πρέπει να ακολουθούνται σε περίπτωση περιστατικών που αφορούν επικίνδυνα και επιβλα-

βή υλικά, χρήση των συγκεκριμένων εγγράφων στον Κώδικα Ασφαλούς Πρακτικής για Στέρεα Φορτία Χύδην αναφορικά με αυτά.

#### Ιατρικές πρώτες βοήθα ες

14 Ο Κώδικας Ιατρικών Πρώτων Βοηθειών για χρήση σε Ατυχήματα που εμπλέκονται επικίνδυνα αγαθά (MFAG) του IMO και η χρήση του και εφαρμογή σε συσχέπση με άλλους οδηγούς και ιατρικές συμβουλές και οδηγίες μέσω τηλεπικάνωνιακών συστημάτων.

### Τμήμα Β-V/c\*

Οδηγίες όσον αφορά την εκπαίδευση αξιωματικών και μελών του πληρώματος που είναι υπεύθυνοι για την διαχείριση φορτίου σε πλοία που μεταφέρουν επικίνδυνες και επιβλαβείς ουσίες σε μορφή πακέτων

1 Η εκπαίδευση θα πρέπει να διαιρείται σε δύο μέρη, ένα γενικό τμήμα επί των αρχών που εμπλέκονται και ένα τμήμα επί της εφαρμογής αυτών των αρχών στη λειτουργία του πλοίου. Όλη η εκπαίδευση και η παροχή οδηγιών θα πρέπει να πραγματοπαιείται από προσοντούχο και έμπειρο προσωπικό και να καλύπτει τουλάχιστον όλα τα θέματα που παρατίθενται στις παραγράφους 2 έως 19 παρακάτω.

#### ΑΡΧΕΣ

#### Χαρακτηριστικά και ιδιότητες

2 Τα σημαντικά φυσικά χαρακτηριστικά και χημικές ιδιότητες επικίνδυνων και επιβλαβών ουσιών που επιτρέπουν βασική κατανόηση των σχετικών εγγενών ιανδύνων.

#### Κατάταξη των επικίνδυνων και επιβλαβών ουσιών και υλικών που εγκυμονούν χημικούς εινδύνους

3 Οι κατηγορίες 1-9 επικίνδυνων αγαθών του ΙΜΟ και οι βλάβες που είναι σχετικές με κάθε κατηγορία,

#### Βλάβες στην υγεία

4 Βλάβες από την επαφή με το δέρμα, εισπνοή, κατάποση και ακτινοβολία.

#### Συμβάσεις, κανονισμοί και συστάσεις

5 Γενική εξαικείωση με τις σχετικές απαιτήσεις των κεφαλαίων II-2 και VII της σύμβασης SOLAS 1974 και του παραρτήματος ΙΙΙ της MARPOL 73/78 περιλαμβανομένης της θέσης της σε ισχύ μέσω του κώδικα IMDG.

#### Χρήση και εξαικείωση με τον Διεθνή Ναυπλιακό Κώδικα Επικίνδυνων Αγαθών (IMDG)

- 6 Γενική γνώση των απαιτήσεων του Κώδικα IMDG που αφορούν τη δήλωση, πιστοποίηση, συσκευασία, σήμανση και τοποθέτηση πινακίδων, φορτίο εμπορευματοιβωτίου και φόρτωση σε όχημα, φορητές δεξαμενές, δεξαμενές που μεταφέρουν εμπορευματοιβώπα και δεξαμενές οχημάτων, και άλλες μονάδες μεταφοράς που χρησιμοποιούνται για επικίνδυνες ουσίες.
- 7 Γνώσεις ταυτοποίησης, αντιγραφής επιγραφών σήμανσης για σταβασία ,ασφάλιση, χωρισμό και διαχωρισμό σε διαφορετικούς τύπους πλοίου που μνημονεύονται στον κώδικα IMDG.
- 8 Ασφάλεια προσωπικού περιλαμβανομένου του εξοπλισμού ασφαλείας, μετρητικών οργάνων, η χρήση τους και η πρακτική εφαρμογή και η ερμηνεία των αποτελεσμάτων.

#### ΕΦΑΡΜΟΓΗ ΣΤΟ ΠΛΟΙΟ

#### Κατηγορία 1 - Εκρηκτικά

9 Οι έξι διαιρέσεις βλαβών και οι 13 ομάδες συμβατότητας, συσκευασίες και αποθήκες που χρησιμοποιούνται για την μεταφορά εκρηκτικών, δομική εξυπηρέτηση των εμπορευματοικβωτίων και οχημάτων, διατάξεις στοιβασίας στο κατάστρωμα και κάτω από το κατάστρωμα, διαχωρισμός από επικίνδυνα φορτία άλλων κατηγοριών εντός της κατηγορίας 1 και από μη επικίνδυνα αγαθά, μεταφορά και σταβασία σε επιβατηγά πλοία,

<sup>\*</sup> Σημαώστε ότι δεν υπάρχουν αντίσταχα κανονισμοί στη Σύμβαση ή στα τμήματα του μέρους Α του Κώδικα για τα τμήματα Β/ V-a, B/ V-b, B/ V-c, B/ V-d, B/ V-e, B/ V-f, κα B/ V-g.

καταλληλότητα των χώρων φορτίου, προληπτικά μέτρα ασφαλείας, προληπτικά μέτρα που πρέπει να λαμβάνονται κατά τη φόρτωση και εκφόρτωση.

# Κατηγορία 2 - Αέρια (συμπιεσμένα, υγροπαιημένα, ή αέρια σε διάλυμα) εύφλεκτα, μη εύφλεκτα , μη τοξικά και τοξικά.

10 Τύπα δοχείων πίεσης και φορητών δεξαμενών περιλαμβανομένων συσκευών κλεισίματος και ανακούφισης που χρησιμοπαούντα, κατηγορίες στα βασίας, γενικά προληπικά μέτρα στα βασίας περιλαμβανομένων αυτών που αφορούν τα εύφλεκτα και δηλητηριώδη αέρια και τα αέρια που ρυπαίνουν το θαλάσσιο περιβάλλον.

## Κατηγορία 3 - Εύφλεκτα υγρά

11 Συσκευασίες, δεξαμενές εμπορευματοκιβωτίων, φορητές δεξαμενές και αναχτές δεξαμενές οχημάτων, κατηγορίες στα βασίας περιλαμβανομένων των ειδικών απαιτήσεων για πλαστικά δοχεία, γενικά προληπτικά μέτρα στα βασίας περιλαμβανομένων ρυπαντικών θαλλασίου περιβάλλοντος, απαιτήσεις διαχωριαμού, προληπτικά μέτρα που πρέπει να λαμβάνονται όταν γίνεται μεταφορά ευφλέκτων υγρών σε ανυψωμένες θερμοκρασίες.

Κατηγορία 4.1. - Εύφλεκτα στερεά

Κατηγορία 4.2. - Ουσίες που υπόκα ντα σε αυτόματη ανάφλεξη

Κατηγορια 4.3. - Ουσίες α οποίες, όταν έλθουν σε επαφή με νερό, αναδίδουν εύφλεκτα αέρια.

12 Τύπος συσκευασιών, μεταφορά και στα βασία σε ελεγχόμενες θερμοκρασίες για να προληφθεί διάσπαση και ενδεχόμενη έκρηξη, κατηγορίες στα βασίας, γενικά προληπτικά μέτρα στα βασίας περιλαμβανομένων και αυτών που εφαρμόζονται σε αυτοαντιδρούσες και σχετικές ουσίες, αδρανοπαιημένα εκρηκτικά και θαλάσσιοι ρυπαντές, απαιτήσεις διαχωρισμού για να προληφθεί θέρμανση και ανάφλεξη, η εκπομπή δηλητηριωδών ή εύφλεκτων αερίων και ο σχηματισμός εκρηκτικών μειγμάτων.

## Κατηγορία 5.1 Οξειδωτικές ουσίες Κατηγορία 5.2. Οργανικά υπεροξείδια

13 Τύπαι συσκευασιών, μεταφορά και σταβασία σε ελεγχόμενες θερμοκρασίες για να προληφθεί διάσπαση και πιθανή έκρηξη, κατηγορίες στα βασίας περιλαμβανομένων και αυτών που εφαρμόζονται σε θαλάσσιους ρυπαντές, απαιτήσεις διαχωρισμού για να εξασφαλισθεί διαχωρισμός από εύφλεκτο υλικό, από οξείδια και πηγές θερμότητας για να προληφθεί πυρκαιά, έκρηξη και ο σχηματισμός τοξικών αερίων, προληπτικά μέτρα για την ελαχιστοποίηση τριβών και πρόσκρουσης που μπορεί να προκαλέσει διάσπαση.

# Κατηγορία 6.1 Τοξικές ουσίες Κατηγορία 6.2 Μολυσματικές ουσίες

14 Τύποι συσκευασιών, κατηγορίες σταβασίας, γενικά προληπτικά μέτρα σταβασίας περιλαμβανομένων και αυτών που εφαρμόζονται σε τοξικά, εύφλεκτα υγρά και ναυπλιακούς ρύπους, απαιτήσεις διαχωρισμού ιδιαίτερα όσον αφορά ότι η καινή ιδιότητα αυτών των ουσιών είναι η πρόκληση θανάτου ή σοβαρων βλαβών της ανθρώπινης υγείας, μέτρα απολύμανσης σε περίπτωση διαρροής.

# Κατηγορία 7 – Ραδί ενεργά υλικά

15 Τύπος συσκευασιών, δείκτης μεταφοράς σε σχέση με την στοιβασία και διαχωρισμό, στοιβασία και διαχωρισμός από άτομα, φωτογραφικό φίλμ και πλάκες που δεν έχουν εμφανισθεί και τρόφιμα, κατηγορίες στοιβασίας γενικές απαιτήσεις διαχωρισμού και αποστάσεις διαχωρισμού, διαχωρισμός από άλλα επικίνδυνα αγαθά.

# Κατηγορία 8 – Διαβρωτικά υλικά

16 Τύπος συσκευασιών, κατηγορίες στοιβασίας, γενικά προληπτικά μέτρα στοιβασίας περιλαμβανομένων και αυτών που εφαρμόζονται σε διαβρωτικά, εύφλεκτα υγρά και θαλάσσιους ρυπαντές, απαιτήσεις διαχωρισμού ιδιαίτερα όσον αφορά την καινή ιδιότητα αυτών των ουσιών που είναι η ικανότητα τους να προκαλούν σημαντικότατη ζημιά σε ζωντανούς ιστούς.

# Κατηγορία 9 - Δι άφορες επικίνδυνες ουσίες και αντικείμενα

17 Παραδείγματα κινδύνου περιλαμβανομένης της θαλάσσιας ρύπανσης.

## Προληπικά μέτρα ασφαλείας και διαδικασίες έκτακτης ανάγκης.

18 Ηλεκτρική ασφάλεια στους χώρους φορτίου, προληπτικά μέτρα που πρέπει να λαμβάνονται για είσοδο σε περίκλειστους χώρους που μπορεί να υπάρχει έλλειψη οξυγόνου, δηλητηρώδες ή εύφλεκτες ατμόσφαιρες, α πιθανές επιπτώσεις ή πυρκαγιάς στην αποστολή ουσιών κάθε κατηγορίας, θεώρηση των γεγονότων στο κατάστρωμα ή κάτω από αυτό χρήση του εγχειριδίου Διεργασιών Ανάγκης για πλοία που μεταφέρουν επικίνδυνα αγαθά, σχέδια ανάγκης και διεργασίες που πρέπει να ακολουθούνται σε περιστατικά όπου εμπλέκονται επικίνδυνες ουσίες.

#### Ιατρικές πρώτες βοήθα ες

19 Ο οδηγός Ιατρικών Πρώτων Βοηθειών του ΙΜΟ για χρήση σε Ατυχήματα που εμπλέκονται επικίνδυνα αγαθά (MFAG) και η χρήση και εφαρμογή του σε συνδυασμό με άλλους οδηγούς και ιατρικές συμβουλές μέσω τηλεπικανωνιακών συστημάτων

#### Τμήμα Β-V/d'

Οδηγίες σχετικά με την εφαρμογή διατάξεων της STCW Σύμβασης σε κινητές θαλάσσιες μονάδες (MOUs)

- 1 Οι διατάξεις της Σύμβασης STCW ισχύουν για τους ναυτικούς αυτοωθούμενων MOUs δραστηριοτήτων πλόων.
- 2 Οι διατάξεις της Σύμβασης STCW δεν ισχύουν για μη αυτοωθούμενα MOUs ή για MOUs σταθμών.
- 3 Κατά την εξέταση κατάλληλων προτύπων εκπαίδευσης και πιστοποίησης όταν MOU είναι για σταθμό, η χώρα νηολόγησης πρέπει να λαμβάνει υπόψη σχετικές συστάσεις IMO. Ιδιαίτερα, όλα τα μέλη ναυτικού προσωπικού σε αυτοωθούμενα MOUs και, όπου απαιτείται, σε άλλες μονάδες πρέπει να πληρούν τις απαιτήσεις της Σύμβασης STCW, όπως προποποιείται.
- 4 Αυτοωθούμενες MOUs δραστηριότητες διεθνών πλόων απαιτούνται να φέρουν έγγραφα ασφαλούς επάνδρωσης.
- 5 MOUs σταθμών υπόκενται στην εθνική νομοθεσία παράκπων Κρατών στα οποία λειτουργούν Απολκλειστικές Οικονομικές Ζώνες (ΑΟΖ). Τέταια παράκπα Κράτη πρέπει επίσης να λαμβάνουν υπόψη τις σχετικές συστάσεις του ΙΜΟ και δεν πρέπει να ορίζουν υψηλότερα πρότυπα για MOUs νηολογημένα σε άλλες χώρες από τα πρότυπα που ισχύουν για MOUs νηολογημένα σε παράκτιο Κράτος.
- 6 Όλο το ειδικό προσωπικό που απασχολείται σε MOUs (είτε αυτοωθούμενα ή όχι ) πρέπει να έχει την κατάλληλη εξαικείωση και βασική εκτταίδευση σύμφωνα με τις σχετικές συστάσεις του IMO.

#### Τμήμα Β-V/e\*

Οδηγίες που αφορούν την εκπαίδευση και τα προσόντα πλοιάρχων και αξιωματικών υπεύθυνων τήρησης φυλακής ναυσιπλοΐας σε πλοία-εφοδιασμο<del>ύ α</del>νοιχτής θάλασσας

- 1 Είναι σημαντικό ότι οι πλοίαρχοι και οι αξιωματικοί που απασχολούνται σε επιχειρήσεις εφοδιασμού αναχτής θάλασσας πρέπει να έχουν την σχετική εμπειρία ή εκπαίδευση πριν την ανάληψη καθηκόντων σε πλοία εφοδιασμού αναχτής θάλασσας, Πρέπει να επικεντρώνεται σε επιχειρησιακή εμπειρία σε πλοίο ή σε ένα συνδυασμό επιχειρησιακής εμπειρίας και εκπαίδευσης προσομοίωσης.
- 2 Οι πλοίαρχαι και οι αξιωματικοί πρέπει ναι κατανοούν τα μοναδικά χαρακτηριστικά ελιγμών και διαχείρισης που είναι καινά σε πλοία εφοδιασμού αναχτής θάλασσας.
- 3 Πριν την εκτέλεση επιχαρήσεων εφοδιασμού αναιχτής θάλασσας, ο πλοίαρχος και οι αξιωματικοί πρέπα:
  - .1 να έχουν γνώση τη βιομηχανία ανοιχτής θάλασσας και τους όρους που χρησιμοπαιούνται σε διάφορες επιχειρήσεις,

<sup>\*</sup> Σημεώστε ότι δεν υπάρχουν αντίσταχα κανονισμοί στη Σύμβαση ή στα τμήματα του μέρους Α του Κώᾶκα για τα τμήματα Β/ V-a, Β/ V-b, Β/ V-c, Β/ V-d, Β/ V-e, Β/ V-f, κα Β/ V-g.

<sup>\*</sup> Σημεώστε ότι δεν υπάρχουν αντίσταχα κανονισμοί στη Σύμβαση ή στα τμήματα του μέρους Α του Κώᾶκα για τα τμήματα Β/ V-a, Β/ V-b, Β/ V-c, Β/ V-d, Β/ V-e, Β/ V-f, κα Β/ V-g.

- .2 να κατανοούν τη σημασία διατήρησης ασφαλούς εργασιακής απόστασης πάντα, όταν εργάζοντα σε εγκαταστάσεις αναχτής θάλασσας,
- .3 να έχουν γνώση των ελιγμών του πλοίου και την παραμονή σε σταθμό υπό διάφορες καιρικές συνθήκες,
- .4 να κατανοούν τις συγκεκριμένους παραμέτρους σχεδιασμού των πλοίων, και
- .5 να κατανοούν την ανάγκη να έχουν ανεμπόδιστη οπτική άποψη στις περιοχές εργασίας.
- 4 Ενώ βρίσκονται σε πλοίο εφοδιασμού αναχτής θάλασσας, ο πλοίαρχος και αιαξιωματικοί πρέπει:
  - .1 να έχουν γνώση των χαρακτηριστικών διαχείρισης και της συμπεριφοράς των πλοίων που έχουν διάφορες ρυθμίσεις πρόωσης, και
  - .2 να μπορούν α λειτουργούν πλοίο εφοδιασμού ανοιχτής θάλασσας όταν είναι κοντά σε εγκαταστάσεις ανοιχτής θάλασσας και σε άλλα πλοία.
- 5 Οι Πλοίαρχοι πρέπει να κατανοούν την ανάγκη για άλλο προσωπικό στο πλοίο που απασχολείται στην εκτέλεση επιχειρήσεων εφοδιασμού αναχτής θάλασσας για να εξακειώνεται με τα καθήκοντά τους.

Πλοία εφοδιασμού ανοιχτής θάλασσας που εκτελούν επιχειρήσεις διαχείρησης άγκυρας

- 6 Είναι σημαντικό οι πλοίαρχοι και οι αξιωματικοί υπεύθυναι για την τήρηση φυλακής ναυσιπλοΐας σε πλοία εφοδιασμού αναιχτής θάλασσας που ασχολούνται με τις επιχειρήσεις διαχείρισης άγκυρας να έχουν σχετική εμπειρία και εκπαίδευση.
- 7 Πριν την εκτέλεση επιχαρήσεων διαχείρισης άγκυρας, οι πλοίαρχοι και οι αξιωματικοί υπεύθυνοι τήρησης φυλακής ναυσιπλοΐας πρέπει:
  - .1 να είναι καλά πληροφορημένοι για τα χαρακτηριστικά διαχείρισης του πλοίου σε σχέση με τη διαχείριση άγκυρας, περιλαμβάνοντας, αλλά όχι να περιορίζονται σε:
    - .1.1 ναυσιπλοΐα και τήρηση στίγματος,
    - .1.2 διαχείριση πλοίου,
    - .1.3 ενδελεχής γνώση ευστάθειας πλοίων εφοδιασμού αναχτής θάλασσας, συγκεκριμένα συνδυασμός χαμηλής Gzmax, χαμηλό αναχτό κατάστρωμα και μεγάλες εξωτερικές δυνάμεις. Χρήση υπολογιστών φόρτωσης και αντίθεση ανάμεσα σε ένα σκληρό και άκαμπτο πλοίο και σε καλό εργασιακό περιβάλλον στο κατάστρωμα. Πιθανή μείωση ευστάθειας από την χρήση αντιδιατοχιστικών συσκευών, και
    - .1.4 επιχειρήσεις σε περιοχές πετρελαίου, περιλαμβανόμενες περιοχές που βρίσκονται αντλίες ή άλλες δομές στον πυθμένα στην περιοχή όπυ άγκυρες ή άλλος εξοπλισμός αγκυροβόλησης πιθανώς να χρησιμοποιείται, και
  - .2 να είναι ενδελεχώς εξοικειωμένοι με την χρήση οργάνων και συστημάτων του πλοίου που αφορούν και έχουν σχέση με τη διαχείριση της άγκυρας, περιλαμβανομένων των ικανοτήτων τους και περιορασμών αλλά να μην περιορίζονται:
    - .2.1 στην χρήση διάφορων προωστικών ισχύων , συμβατικής ή με αζυμούθιο πρόωσης,
    - .2.2 ανύψωση, διαχείριση, βαριά ανύψωση, ρυμούλκηση, διαχείριση άγκυρας και αγκυροβόληση τοποφόρων, πλοίων μικρού βυθίσματος και εγκαταστάσεων,
    - .2.3 ρυμούλκηση τσποφόρων, πλοίων μικρού βυθίσματος και άλλων πλοίων,
    - .2.4 λειτουργία βαρούλκων ανύψωσης και ρυμούλκησης με 600 μετρικούς τόνους ξύλινους στύλους,
    - .2.5 λεπτομερής ενδελεχής γνώση της βάσης λειτουργίας των βαρούλκων ρυμούλκησης και διαχείρισης άγκυρας, ιδιαίτερα, λειτουργίες των συσκευών περιορισμού φόρτωσης και των συ-

στημάτων ανακούφισης και του σχετικού εξοπλισμού όπως πείραι ρυμούλκησης και ανασχετήρες, και

.2.6 στην σημαντική διαφορά ανάμεσα στον αφετήρα έκτακτης ανάγκης ελασμάτων και βαρούλ-κων.

8 Πλοίαρχοι και αξιωματικοί υπεύθυνοι τήρησης φυλακής ναυσιπλοΐας όταν είναι υπεύθυνοι για τη διαχείριση άγκυρας πρέπει να έχουν επαρκή και κατάλληλη εκπαίδευση και εμπειρία έχοντας επιτηρηθεί κατά τη διάρκεια κινήσεων σκάφους, όπως εκτιμάται από τη Διοίκηση. Η εκπαίδευση μπορεί να συμπληρώνεται από κατάλληλη εκπαίδευση προσομοίωσης.

#### Τμήμα Β-V/f\*

Οδηγίες εκπαίδευσης και εμπειρίας για προσωπικό που χειρίζεται δυναμικά συστήματα καθορισμού στίγματος

- 1 Δυναμικός καθορισμός στίγματος ορίζεται το σύστημα μέσω του οποίου το στίγμα και η κατεύθυνση ενός αυτοωθούμενου πλοίου ελέγχεται αυτόματα με την χρήση των δικών του μονάδων πρόωσης.
  - 2 Το προσωπικό που απασχολείται στον χειρισμό του Δυναμικού συστήματος Καθορισμού Στίγματος (DP) πρέπει να λαμβάνει εκπαίδευση και πρακτική εμπειρία. Θεωρητικά στοιχεία αυτής της εκπαίδευσης πρέπει να καθιστούν ικανούς τους Χειριστές Δυναμικού Καθορισμού Στίγματος (DPOs) για να κατανοεί την λειτουργία του συστήματος DP και τα στοιχεία τους. Η αποκτηθείσα γνώση, κατανόηση και εμπειρία πρέπει να καθιστούν ικανό το προσωπικό να χειρίζεται με ασφάλεια τα πλοία στο DP, με ιδιαίτερη προσοχή στην ασφάλεια. ζωής στη θάλασσα και προστασία θαλασσίου περιβάλλοντος.
  - 3 Το περιεχόμενο της εκπαίδευσης και εμπειρίας πρέπει να καλύπτει τα ακόλουθα σταιχεία του συστήματος DP:
  - .1 Σταθμός ελέγχου DP,
  - .2 Παραγωγή και διαχείριση ισχύος,
  - .3 μονάδες πρόωσης,
  - .4 συστήματα αναφοράς καθορισμού στίγματος,
  - .5 συστήματα αναφοράς κατεύθυνσης,
  - .6 συστήματα αναφοράς περιβάλλοντος, και
  - .7 συστήματα αναφοράς εξωτερικής δύναμης, όπως μετρητές ισχύος συρματόσχανων.
- 4 Η εκπαίδευση και η εμπαρία πρέπα να καλύπτα το εθρος των επιχαρήσεων ρουτίνας DP, καθώς επίσης τη διαχείριση λαθών του DP, αποτυχίες, ατυχήματα και έκτακτες ανάγκες, για να διασφαλίσα όπι οι επιχαρήσας συνεχίζονται ή τερματίζονται με ασφάλεια. Η εκπαίδευση δεν πρέπα να περιορίζεται σε DPOs και DP πλοίσερχαι μόνο, άλλο προσωπικό στο πλοίο, όπως ηλεκτροτεχνικοί και μηχανικοί, μπορεί να απαιτούν επιπρόσθετη εκπαίδευση και εμπαιρία για να διασφαλίζουν όπι είναι ικανοί να εκτελέσουν τα καθήκοντά τους σε πλοίο DP. Πρέπα να εξετασθεί η εκτέλεση ασκήσεων DP ως μέρος της εκπαίδευσης και εμπαιρίας στο πλοίο. Οι χαιριστές δυμανικού καθορισμού στίγματος (DPOs) πρέπα να γνωρίζουν τον τύπο και τον σκοπό των σχετικών με τις λατουργίες του DP εγγράφων, όπως λατουργικά εγχαιρίδια, Τρόπους Αποτυχίας και Ανάλυση Επιπτώσεων ( FMEAs) και ικανότητα εθρεσης στίγματος.
- 5 Όλη η εκπαίδευση πρέπει να παρέχεται από κατάλληλα προσοντούχο και έμπειρο προσωπικό.
- 6 Μετά τον διορισμό σε πλοίο που λειτουργεί σε DP, ο πλοίαρχος, οι χειριστές DP και άλλο εκπειδευμένο προσωπικό DP πρέπει να εξαικειώνεται με τον συγκεκριμένο εξοπλισμό και τα χαρακτηριστικά του πλοίου. Ειδική προσοχή πρέπει να δίνεται στη φύση εργασίας του πλοίου και την σπουδαιότητα του συστήματος DP στην εργασία.

<sup>\*</sup> Σημαώστε όπ δεν υπάρχουν αντίσταχα κανονισμοί στη Σύμβαση ή στα τμήματα του μέρους Α του Κώᾶκα για τα τμήματα Β/ V-a, B/ V-b, B/ V-c, B/ V-d, B/ V-e, B/ V-f, κα B/ V-g.

Τμήμα B-V/g\*

Οδηγίες που αφορούν την εκπαίδευση πλοιάρχων και αξιωματικών σε πολικά ύδατα<sup>\*</sup>

- 1 Είναι σημαντικό ότι οι πλοίαρχοι και οι αξιωματικοί υπεύθυνοι τήρησης φυλακής ναυσιπλοΐας και οι αξιωματικοί τήρησης φυλακής μηχανής σε πλοία που πλέουν σε πολικά ύδατα πρέπει να έχουν σχετική εμπειρία και εκπαίδευση, ως ακολούθως:
  - .1 Πριν την ανάθεση καθηκόντων σε τέτα α πλοία:
    - .1.1 Για πλαάρχους και αξιωματικούς υπεύθυνους τήρησης φυλακής ναυσιπλοΐας, η εκπαίδευση πρέπει να παρέχει βασική γνώση τουλάχιστον στα θέματα που δίνονται στις παραγράφους 2 έως 11 παρακάτω, και
    - .1.2 Για αξιωματικούς υπεύθυνους τήρησης φυλακής μηχανής, η εκπαίδευση πρέπει να παρέχει βασική εκπαίδευση τουλάχιστον στα θέματα που δίνονται στις παραγράφους 3,6,10 και 11 παρακάτω.
  - .2 Οι Πλοίαρχο και οι Μηχανικοί πρέπει να έχουν επαρκής και κατάλληλη εμπειρία στον χειρισμό πλοίων σε πολικά ύδατα.

# Χαρακτηρι στι κά πάγου – περι οχές πάγου

2 Μετάφραση διαφορετικών χαρτών πάγου και γνώση περιορισμών στα δεδομένα μετεωρολογίας και ωκεανογραφίας, η φυσική κατάσταση του πάγου, το σχήμα, το μέγεθος, η ηλικία και το στάδιο τήξης, τύποι πάγου και συμπυκνώσεις, πίεση πάγου, τριβή από πάγο που καλύπτεται με χιόνι, επιπτώσεις στο πάγωμα με ψεκασμό και πάγωμα, προληπτικά μέτρα κατά του παγώματος και την απάλυνση συνεπειών, καθεστώτα πάγου σε διαφορετικές περιοχές και διαφορετικές εποχές, περιλαμβανομένες τις διαφορές ανάμεσα στην Αρκτική και στην Ανταρκτική, αναγνώριση των συνεπειών της γρήγορης αλλαγής στις συνθήκες του καιρού και του πάγου, μετακίνηση των παγόβουνων και συμπαγούς πάγου.

# Λειτουργία πλοίου σε παγωμένα και κρύα κλίματα

3 Χαρακτηριστικά πλοίων, τύπα πλοίων, σχέδια κύτους, απαιτήσεις ενδυνάμωσης πάγου, τάξη πάγου διαφορετικών κατηγοριών – πολική τάξη και τοττικοί κανονισμοί, περιορισμοί τάξεων πάγου, ετοιμασία για τον χειμώνα και ετοιμότητα πλοίου, λειτουργία συστήματος χαμηλής θερμοκρασίας.

# Σχεδι ασμός πλου και πέρασμα πλοίου σε πάγο.

4 Ανάπτυξη ασφαλούς διαδρομής και σχεδιασμού περάσματος προς αποφυγή πάγου όπου είναι δυνατό, περιλαμβανομένης μετάφρασης διάφορων μορφών πάγου και δεδομένα υποστήριξης προετοιμασίας ενός στρατηγικού σχεδιασμού περάσματος, είσοδος πάγου από τα αναχτά ύδατα για να αποφευχθούν τα παγόβουνα και οι συνθήκες επικίνδυνου πάγου, ναυσιπλοΐα όταν είναι ασφαλής ή δεν είναι ασφαλής να εισέρχεται σε περιοχές που περιέχουν πάγο ή παγόβουνα λόγω σκοτεινότητας, κυμαπομού, ομίχλης ή πίεσης πάγου.

# Λειτουργία και διαχείριση πλοίου σε πάγο

- 5 Προεταμασίες και αξιολόγηση κινδύνου πριν την προσέγγιση υδάτων που κατακλύζονται αό πάγο, μη υποστηριγμένη λειτουργία των πλοίων με διαφορετική τάξη πάγου σε διαφορετικούς τύπους, ασφαλής ταχύτητα στην παρουσίαση πάγου και παγόβουνων, επικοινωνίες με παγοθραύστες και άλλα πλοία, ναυσιπλοΐα σε διαφορετικές συγκεντρώσεις και κάλυψη πάγου, γνώση της αύξησης ενέργειας κίνησης, χρήση παγόβουνων για καταφύγιο και πρόσβαση μέσω πυκνών πάγων.
- 6 Χρήση διαφορετικού τύπου συστήματος πρόωσης και πηδαλίου, περιλαμβανομένης γνώσης δύναμης συστήματος και περιορισμοί ικανότητας, χρήση συστημάτων ισοβύθισης και κλίσης πλοίου, φόρτος μηχανής και προβλήματα ψύξης.

#### Κανονισμοί και συστάσεις

Σημειώστε ότι δεν υπάρχουν αντίστα χα κανονισμοί στην Σύμβαση ή στα τμήματα του μέρους Α του Κώδικα για τα τμήματα Β-V/a, B-V/b, B-V/c, B-V/d, B-V/e, B-V/f ка B-V/g.

<sup>\*</sup> Αναφορά στην απόφαση Α.1024 (26) της Ολομέλειας του ΙΜΟ σχετικά με Οδηγίες για πλοία που επιχειρούν σε πολικά ύδατα.

7 Τοπικές απαιτήσεις για είσοδο στις διαφορετικές περιοχές, περιλαμβανομένης της Συνθήκης της Ανταρκτικής, διεθνείς κανονισμοί και συστάσεις.

#### Περιορισμοί εξοπλισμού

8 Χρήση και κίνδυναι που έχουν σχέση με τα επίγεια μέσα ναυσιπλοΐας σε πολικά ύδατα, λάθη πυξίδας γεωγραφικού πλάτους, διάκριση στόχων ραντάρ και χαρακτηριστικά πάγου στην οθόνη ραντάρ, περιορισμοί ηλεκτρονικού συστήματος καθορισμού στίγματος σε υψηλό γεωγραφικό πλάτος, περιορισμοί σε ναυτικούς χάρτες και περιγραφές πιλότου, περιορισμοί στα συστήματα επικονωνίας.

# Προστατευτικά μέτρα ασφάλειας και διαδικασίες έκτακτης ανάγκης

- 9 Διαθεσιμότητα υδρογραφικών δεδομένων επαρκή για ασφαλή ναυσιπλοΐα και εταιμότητα διάσωσης και ευθύνη, περιλαμβάνοντας το GMDSS περιοχή Α4 και περιορισμός εγκατάστασης επικαινωνίας SAR, γνώση σχεδιασμού έκτακτης ανάγκης, γνώση διαδικασιών ρυμούλκησης, αξία επικοινωνίας με άλλα πλοία και τοπική οργάνωση SAR, αναγνώριση κινδύνων όταν το πλήρωμα εκτίθεται σε χαμηλές θερμοκρασίες, διαδικασίες και τεχνικές εγκατάλειψης πλοίου και επιβίωση σε πάγο, προβλήματα κούρασης πληρώματος λόγω θορύβου και κραδμών, μεταφορά επιπρόσθετων πόρων όπως αποθήκες, τροφή και επιπλέον ρουχισμός, γνώση επιπρόσθετης αυστηρότητας συνθηκών ατυχημάτων σε πολικά ύδατα.
- 10 Θέσπιση διαδικασιών ασφαλούς εργασίας, γνώση του πιο γνωστού ενιαίου κύτους και βλάβες εξοπλισμού και πώς να τους αποφύγουμε, περιορισμοί συστημάτων πυρόσβεσης.

### Περι βαλλον εκές εξετάσεις

11 Ευαίσθητες θαλάσσιες περιοχές όσον αφορά την εκφόρτωση, περιοχές όπου απαγορεύεται η μεταφορά ή πρέπει να αποφεύγεται. Ειδικές περιοχές στην MARPOL, περιορισμοί εξοπλισμού πετρελαιοκηλίδας, σχέδιο αντιμετώπισης αυξημένων όγκων απορριμάτων, νερού υδροσυλλεκτών, λάστης, αποχέτευσης κ.τ.λ, συνέπειες ρύπανσης σε ψυχρό κλίμα.

#### ΚΕΦΑΛΑΙΟ VI

Οδηγίες αναφορικά με την έκτακτη ανάγκη, την εργασιακή ασφάλα α, την ασφάλα α ...., την ιατρική μέρ μνα και τις λα τουργίες επι βίωσης

### Τμήμα Β - ۷Ι/1

Οδηγίες όσον αφορά υποχρεωτικές απαιτήσεις για εξοικείωση σε θέματα ασφαλείας και βασική εκπαίδευση και οδηγίες για όλους τους ναυτικούς

#### ΠΡΟΛΗΨΗ ΠΥΡΚΑΙΩΝ ΚΑΙ ΠΥΡΟΣΒΕΣΗ

1 Η βασική εκπαίδευση πρόληψης πυρκαιών και πυρόσβεσης που απαιτείται από το τμήμα Α-VI/1 πρέπει να περιλαμβάνει τουλάχιστον τα θεωρητικά και πρακτικά σταιχεία που παρατίθενται στις παραγράφους 2 έως 4 παρακάτω:

### Θεωρηπική εκπαίδευση

- 2 Η θεωρητική εκπαίδευση πρέπει να καλύπτει:
  - .1 τα τρία στοιχεία πυρκαγιάς και έκρηξης (το τρίγωνο πυρκαγιάς), καύσιμο, πηγή ανάφλεξης, οξυγόνο,
  - .2 πηγές ανάφλεξης: χημικές, βιολογικές, φυσικές,
  - .3 εύφλεκτα υλικά: ευφλεκτικότητα, σημείο ανάφλεξης θερμοκρασία καύσης, ταχύτητα καύσης, θερμική αξία, χαμηλό σημείο ευφλεκτικότητας (LFL), υψηλό σημείο ευφλεκτικότητας (UFL) ,εύρος ευφλεκτικότητας, αδράνεια, στατικός ηλεκτρισμός, σημείο ανάφλεξης, αυτανάφλεξη.

- .4 κίνδυνος πυρκαγιάς και εξάπλωση της πυρκαγιάς με ακπνοβολία, μεταφορά και αγωγιμότητα,
- .5 ανπδραστικότητα,
- .6 κατάταξη πυρκαιών και εφαρμόσιμα πυροσβεστικά υλικά,
  - .7 κύριες ατίες πυρκαιών σε πλοία, διαρροή πετρελαίου στο μηχανοστάσιο, τσιγάρα, υπερθέρμανση ( έδρανα ), συσκευές κουζίνας (φούρνος, καπνοδόχα, ψησπέρες, θερμές επιφάνειες κ.λ.π.), αυτόματη ανάφλεξη (φορτίο, απορρίμματα κ.λ.π.), εργασία εν θερμώ (συγκόληση, κοπή κ.λ.π.) ηλεκτρικές συσκευές ( βραχυκύκλωμα, επισκευές από μη επαγγελματίες) αντίδραση, αυτοθέρμανση και αυτοανάφλεξη, εμπρησμός, στατικός ηλεκτρισμός,
  - .8 πρόληψη πυρκαγιάς,
  - .9 συστήματα ανίχνευσης πυρκαγιάς και καπνού,
  - .10 πυροσβεστικός εξοπλισμός στον οποίο περιλαμβάνονται:
    - .10.1 μόνιμες εγκαταστάσεις πλοίων και α θέσεις τους, κύρια σωλήνωση πυρκαγιάς, στόμια λήψης ύδατος, διεθνή σύνδεση ξηράς, εγκαταστάσεις απόπνιξης, διοξείδιο του άνθρακα CO2, αφρός, σύστημα ψεκασμού ύδατος με πίεση σε χώρους ειδικής κατηγορίας κ.λ.π. αυτόματο σύστημα καταιονισμού, αντλία πυρκαγιάς ανάγκης, γεννήτρια έκτακτης ανάγκης, εφαρμογής χημικής σκόνης, γενική περιγραφή των απαιτουμένων και διαθεσίμων φορητών συσκευών, σύστημα ομίχλης υψηλής πίεσης, αφρός υψηλής εκτόνωσης, νέες εξελίξεις και εξοπλισμός,
    - .10.2 στολή πυροσβέστου, ατομικός εξοπλισμός, αναπνευστική συσκευή, συσκευές ανάνηψης, κράνος ή μάσκα καπνού, αλεξίπυρο σχανί σωσιβίου και μέσα πρόσδεσης και η θέση τους επί του πλοίου, και
    - .10.3. γενικός εξοπλισμός, περιλαμβανομένων σωληνώσεων πυρόσβεσης, ακροφυσίων, συνδέσεων, πυροσβεστικών τσεκουριών, φορητών πυροσβεστήρων, καλυμμάτων πυρκαγιάς,
  - .11 κατασκευή και ρυθμίσεις περιλαμβανομένων διόδων διαφυγής, μέσων απελευθέρωσης των δεξαμενών από αέρια, διαιρέσεις Κατηγορίας Α, Β και C, συστήματα αδρανούς αερίου,
  - .12 οργάνωση πυρόσβεσης στο πλοίο περιλαμβανομένου του γενικού συναγερμού, σχέδια ελέγχου πυρκαγιάς, σταθμοϊ συγκέντρωσης και ατομικά καθήκοντα, επικανωνίες, περιλαμβανομένης και της μεταξύ πλοίου και ξηράς όταν είναι το πλοίο σε λιμένα, διαδικασίες περοσωπικού ασφάλειας, περιοδικά γυμνάσια στο πλοίο, συστήματα περιπολιών,
  - .13 πρακτική γνώση των μεθόδων ανάνηψης,
  - .14 μέθοδος πυρόσβεσης περιλαμβανομένων της ήχησης του συναγερμού, εντοπισμού και απομόνωσης, απόρριψης, αναχαίτισης, ψύξης, κατάπνιξης, πυρόσβεσης, φυλακής αναζωπύρωσης, εξαγωγής καπνού, και
  - .15 πυροσβεστικά μέσα,περιλαμβανομένων νερού, στερεάς εκροής, ψεκασμού, ομίχλης, κατάκλισης, αφρού υψηλής μεσαίας και χαμηλής εκτόνωσης, διοξειδίου του άνθρακα ( CO2 ), αφρού που σχηματίζε υδάτινη μεμβράνη (AFFF), ξηράς χημικής σκόνης, νέων εξελίξεων και εξοπλισμού.

#### Πρακτική εκπαίδευση

- 3 Η πρακτική εκπαίδευση που δίνεται παρακάτω πρέπει να πραγματοπαιείται σε χώρους που παρέχουν πραγματικά ρεαλιστικές συνθήκες εκπαίδευσης (π.χ. εξομαιούμενες καταστάσεις πλοίου) και οποτεδήποτε είναι πρακτικά δυνατόν θα πρέπει να πραγματοποιούνται κατά τη διάρκεια της νύχτας καθώς επίσης και στο φως της ημέρας για να επιτρέψει στους εκπαιδευόμενους να αποκτήσουν την εκανότητα να:
  - .1 χρησιμοποιήσουν τους διάφορους τύπους φορητών πυροσβεστήρων,
  - .2 χρησιμοποιήσουν αναπνευστικές συσκευές,

- .3 κατασβέσουν μικρότερες πυρκαγιάς π.χ. ηλεκτρικές πυρκαιές, πυρκαιές πετρελαίου και πυρκαιές προπανίου,
- .4 κατασβέσουν εκτεταμένες πυρκαιές με νερό (εκροή και ακροφύσια ψεκασμού),
- .5 κατασβέσουν πυρκαιές είτε με αφρό, σκόνη, ή άλλο κατάλληλο χημικό,
- .6 εισέλθουν και διέλθουν φέροντας σωσίβιο σχανί αλλά χωρίς αναπνευστική συσκευή , διαμέρισμα στο οποίο έχει εκχυθεί αφρός μεγάλης εκτόνωσης,
- .7 καταπολεμήσουν πυρκαιά σε περίκλειστους χώρους γεμάτους με καπνό φέροντας αυτόνομη αναπνευστική συσκευή,
- .8 κατασβέσουν πυρκαιά με ομίχλη νερού ή με οπαιοδήποτε άλλο κατάλληλο πυροσβεστικό υλικό σε δωμάτιο ενδιαίτησης ή σε άλλο εξομαιωμένο μηχανοστάσιο με πυρκαιά και πυκνό κατίνό,
- .9 κατασβέσουν μια πυρκαιά πετρελαίου με ακροφύσια ψεκασμού, ξηρή χημική σκόνη ή συσκευές αφρού, και
- .10 πραγματοποιήσουν διάσωση σε χώρο γεμάτο από καπνό φορώντας αναπνευστική συσκευή.

#### Γενικά

4 Οι εκπαιδευόμενα πρέπει επίσης να ενημερωθούν για την ανάγκη τήρησης κατάστασης εγρήγορσης στο πλοίο.

#### ΒΑΣΙΚΕΣ ΠΡΩΤΕΣ ΒΟΗΘΕΙΕΣ'

5 Η εκπαίδευση στις βασικές πρώτες βοήθειες που απαιτείται από τον κανονισμό VI/1ως τμήμα της βασικής εκπαίδευσης θα πρέπει να παρέχεται στο αρχικό στάδιο της επαγγελματικής εκπαίδευσης, κατά προτίμηση πριν από την εκπαίδευση στη θάλασσα για να είναι οι ναυτικοί σε θέση να λάβουν άμεσα μέτρα όταν αντιμετωπίσουν ατύχημα ή άλλη κατάσταση ιστρικής ανάγκης μέχρι την άφιξη ατόμου με ικανότητες παροχής πρώτων βοηθειών ή του ατόμου που είναι επιφορτισμένο με την ιστρική μέριμνα στο πλοίο.

#### ΠΡΟΣΩΠΙΚΗ ΑΣΦΑΛΕΙΑ ΚΑΙ ΚΟΙΝΩΝΙΚΕΣ ΕΥΘΥΝΕΣ'

6 Οι Αρχές πρέπει να λαμβάνουν υπόψη την σημασία επικανωνιών και δεβοτήτων γλώσσας για τη διατήρηση της ασφάλειας της ζωής και περιουσίας στη θάλασσα και στη πρόληψη θαλάσσιας ρύπανσης. Δεδομένου του διεθνούς χαρακτήρα της ναυπλιακής βιομηχανίας, της εξάρτησης από την επικοινωνία με φωνή από πλοίο σε πλοίο και από πλοίο σε ξηρά της αυξανόμενης χρήσης πολυεθνικών πληρωμάτων και του ενδιαφέροντος ότι τα μέλη του πληρώματος θα πρέπει να είναι σε θέση να επικοινωνούν με επιβάτες σε κατάσταση ανάγκης, η αποδοχή καινής γλώσσας ναυτικών επικοινωνιών θα προήγαγε την πρακτική ασφαλείας μειώνοντας τον κίνδυνο ανθρώπινου σφάλματος κατά την επικοινωνία βασικών πληροφορών.

7 Αν και η Αγγλική δεν είναι διεθνής, από καινή πρακτική γρήγορα γίνεται η πρότυπη γλώσσα επικανωνιών για σκοπούς ναυτικής ασφάλειας, εν μέρει ως αποτέλεσμα της χρήσης του πρότυπου Ναυτικού Λεβλογίου Ναυσιτιλοΐας, όπως αντικατασταθεί από τις Πρότυπες Φράσεις Ναυτικών Επικανωνιών του ΙΜΟ.

8 Οι Αρχές πρέπει να υπολογίσουν τα οφέλη εξασφαλίζοντα ότι οι ναυτικοί διαθέτουν τουλάχιστον ικανότητα χρησιμοποίησης κάποιου βασικού λεβλογίου με έμφαση σε ναυτικούς όρους και καταστάσεις.

#### Τμήμα Β-VI/2

Οδηγίες όσον αφορά τη πιστοποίηση επάρκειας σε σκάφη επιβίωσης, λέμβους διάσωσης και σε ταχύπλοες λέμβους διάσωσης

- 1 Πριν από την έναρξη εκπαίδευσης, ο υποψήφιος πρέπει να ικανοπαιεί την απαίτηση ιατρικής ικανότητας, ιδιαίτερα όσον αφορά την όραση και ακοή,
- 2 Η εκπαίδευση πρέπει να είναι σχετική με τις διατάξεις της Διεθνούς Σύμβασης για την Ασφάλεια της Ζωής στη θάλασσα (SOLAS), όπως έχει τροποποιηθεί,

Οι σχετικές πρότυπες σειρές εκπαίδευσης ΙΜΟ μπορεί να βοηθούν στην προεταμασία των εκπαιδεύσεων

3 Τα Συμβαλλόμενα Μέρη μπορεί επίσης να εκπαίδευονται και να αποκτούν εμπειρία στο πλοίο (όπως συμγυμνάσια ) για τήρηση απαιτούμενου προτύπου εκανότητας του πίνακα Α-VI/2.1, στις περιομετοχής σε χές που περιγράφονται στο τμήμα Α-VI/2, παράγραφοι 6.1.2, 6.1.3,6.1.4, 6.2.1 και 12.1.5. Οι Διακήσεις πρέπει να λαμβάνουν υπόψη ότι η επί του πλοίου εκπαίδευση σε αυτές τις περιοχές μπορούν να διεξάγοντα μόνο υπό καλές καιρικές συνθήκες και σύμφωνα με τους κανονισμούς του λιμένα.

Τμήμα Β-VI/3

Οδηγίες όσον αφορά την εκπαίδευση σε προχωρημένου επιπέδου πυρόσβεση

(Δεν υπάρχουν διατάξεις)

Τμήμα Β-VI/4

Οδηγίες όσον αφορά τις απαιτήσεις σε ιατρικές πρώτες βοήθειες και ιατρική μέριμνα

Τα εκπαιδευτικά προγράμματα για ναυτικούς που είναι ορισμέναι να αναλαμβάνουν τακαθήκοντα, τις ευθύνες και τις αρμοδιότητες που καταχωρούνται στην στήλη 1του πίνακα Α-VI/4-1 για να παρέχουν πρώτες βοήθειες πρέπει να λαμβάνουν υπόψη τις οδηγίες του αναθεωρημένου Διεθνούς Ιατρικού Οδηγού για Πλοία, κατά περίπτωση.

Τμήμα Β-VI/5

Οδηγίες που αφορούν εκπαίδευση και πιστοποίηση για αξιωματικούς ασφάλειας πλοίου

- 1 Η εκπαίδευση πρέπει να σχεπκή με τις διατάξεις του ISPS Κώδικα και της Σύμβασης SOLAS, όπως τροποποιήθηκε.
- 2 Ολοκληρώνοντας την εκπαίδευση, ένας αξιωματικός ασφάλειας πλοίου πρέπει να έχει επαρκή γνώση της Αγγλικής γλώσσας για να μπορεί να μεταφράζει ορθώς και να κοινοπαιεί μηνύματα σχετικά με την εγκατάσταση ασφάλειας πλοίου ή λιμένα.
- 3 Σε περιστάσεις εξαιρετικής ανάγκης, όταν ένα άτομο είναι κάτοχος πιστοποιητικού επάρκειας ως αξιωματικός ασφάλειας πλοίου το οποίο δεν διατίθεται προσωρινά, η Διοίκηση μπορεί να επιτρέπει στον ναυτικό να έχει συγκεκριμένα καθήκοντα και ευθύνες ασφάλειας και να κατανοεί το σχέδιο ασφάλειας πλοίου έως τον επόμενο λιμένα προσέγγισης ή για περίοδο που δεν υπερβαίνει τις 30 ημέρες, όποιο είναι μεγαλύτερο. Η εταιρεία πρέπει όσο το δυνατόν πιο σύντομα, να ενημερώσει τις αρμόδιες αρχές του επόμενου λιμένα προσέγγισης για τις ρυθμίσεις.

Τμήμα Β-VI/6

Οδηγίες που αφορούν τις υποχρεωτικές ελάχιστες απαιτήσεις για εκπαίδευση και οδηγίες σχετικές με την ασφάλεια για όλους τους ναυτικούς.

# Εξα κείωση και γνώση ασφάλειας

- 1 Ναυτικοί και προσωπικό πλοίου που δεν είναι έμπειροι ασφάλειας και δεν είναι στόχος των διατάξεων της Σύμβασης ή αυτού του Κώδικα να τους μετατρέψει σε ειδικούς ασφάλειας.
- 2 Ναυτικοί κα προσωπικό πλοίου πρέπει να λαμβάνουν επαρκή εκπαίδευση ασφάλειας ή οδηγίες και εκπαίδευση εξοικείωσης έτσι ώστε να αποκτούν την απαραίτητη γνώση και κατανόηση για να εκτελούν τα καθήκοντα που ανατίθενται και να συμβάλλουν συλλογικά στην ενίσχυση ναυτικής ασφάλειας.
- 3 Ναυτικοί χωρίς καθορισμένα καθήκοντα ασφάλειας πρέπει να ολοκληρώνουν την εκπαίδευση ή καθοδήγηση ασφάλειας που παρατίθεται στο τμήμα Α-VI/6 τουλάχιστον μια φορά στην καρφέρα τους. Δεν υπάρχει ανάγκη ανανέωσης ή επικύρωσης εκ νέου αυτής της εκπαίδευσης εάν ο ναυτικός ή το εμπλεκόμενο προσωτικό πλοίου πληροί τις απαιτήσεις εξοικείωσης σχετικές με ασφάλεια του κανονισμού VI/6 και να συμμετέχουν στα γυμνάσια και στις ασκήσεις που απαιτούνται από τον Κώδικα ISPS.

# Ναυτικοί με καθορισμένα καθήκοντα ασφάλειας

4 Η έκφραση «με καθορισμένα καθήκοντα» στο τμήμα Α-VI/6 δηλώνει εκείνους που έχουν συγκεκριμένα καθήκοντα και ευθύνες ασφάλειας σύμφωνα με το σχέδιο ασφάλειας πλοίου.

5 Ναυτικοί με καθορισμένα καθήκοντα ασφάλειας πρέπει να ολοκληρώνουν την εκπαίδευση που παρατίθεται στο τμήμα Α-VI/6 τουλάχιστον μια φορά στη καρριέρα τους. Δεν υπάρχει ανάγκη ανανέωσης ή επικύρωσης εκ νέου αυτής της εκπαίδευσης εάν ο ναυτικός ή το εμπλεκόμενο προσωπικό του πλοίου πληροί τις απαιτήσεις εξαικείωσης ι ασφάλειας του κανονισμού VI/6 και να συμμετέχουν στα γυμνάσια και ιστις ασκήσεις που απαιτούνται από τον ISPS Κώδικα.

6 Αυτοί που έχουν «εκπαίδευση εξαικείωσης ασφάλειας» σύμφωνα με το τμήμα Α-VI/6 δεν πρέπει να απαιτείται να πληρούν τις απαιτήσεις είτε του κανονισμού Ι-6 ή του τμήματος Α-1/6.

7 Σε περιπτώσεις εξαιρετικής ανάγκης, όταν τα καθήκοντα ασφάλειας πλοίου απαιτείται να αναλαμβάνονται από προσοντούχο άτομο για να εκτελέσει καθορισμένα καθήκονται και τέταιο άτομο δεν διατίθεται προσωρινά, η Διοίκηση μπορεί να επιτρέπει ένας ναυτικός χωρίς καθορισμένα καθήκονται ασφάλειας να εκτελούν τέταια καθήκονται με την προυπόθεση ότι ένα τέταιο άτομο κατανοεί το σχέδιο ασφάλειας πλοίου, έως τον επόμενο λιμένα προσέγγισης ή για περίοδο που δεν υπερβαίνει τις 30 ημέρες, όπαιο είναι μεγαλύτερο.

#### ΚΕΦΑΛΑΙΟ VII

## Οδηγίες όσον αφορά την εναλλακτική τη στοποίηση

#### Τμήμα Β-۷ΙΙ/1

Οδηγίες όσον αφορά την έκδοση εναλλακτικών πιστοποιητικών

(Δεν υπάρχουν διατάξεις)

#### Τμήμα Β-VII/2

Οδηγίες όσον αφορά τα ειδικά ενιαία εκπαιδευτικά προγράμματα καταστρώματος και μηχανής

- 1 Κάθε Μέρος πρέπει να εξασφαλίζει ότι όποιο ειδικό ενιαίο εκπαιδευτικό πρόγραμμα καταστρώματος και μηχανής :
  - .1 παρέχεται μέσω ενός εγκεκριμένου εκπαιδευτικού προγράμματος,
  - .2 λαμβάνει χώρα στην ξηρά σε ναυτικά εκπαιδευτικά ιδρύματα και/ή σε εγκεκριμένα εκπαιδευτικά πλοία, και
  - .3 καταχωρείται σε εγκεκριμένο εγχαρίδιο εκπαίδευσης.

### Τμήμα Β-VII/3

Οδηγίες όσον αφορά τις αρχές που διέπουν την έκδοση εναλλακτικών πιστοποιητικών

(Δεν υπάρχουν διατάξεις)

#### **ΚΕΦΑΛΑΙΟ VIII**

#### Οδηγίες όσον αφορά την τήρηση φυλακής

#### Τμήμα Β-۷ΙΙ/1

Οδηγίες όσον αφορά την ικανότητα για εκτέλεση υπηρεσίας.

#### Πρόληψη της κόπωσης

- 1 Για την τήρηση των απαιτήσεων της περιόδου ανάπαυσης ο όρος «επικρατούσες επιχειρησιακές συνθήκες» θα πρέπει να εκλαμβάνεται ότι εννοεί μόνο ουσιώδους φύσης εργασίες στο πλοίο που δεν μπορούν να καθυστερήσουν για λόγους ασφαλείας και περιβάλλοντος ή οι οποίες δεν θα μπορούσαν λογικά να έχουν προβλεφθεί κατά την έναρξη του πλου.
- 2 Αν και δεν υπάρχει καινά αποδεκτός τεχνικός ορισμός της κόπωσης, κάθε ένας που εμπλέκεται σε εργασίες στο πλοίο πρέπει να βρίσκεται σε εγρήγορση ως προς τους παράγοντες που μπορεί να συμβάλλουν στην δημιουργία κόπωσης, περιλαμβανομένων αλλά όχι περιοριζόμενος, και σε εκείνους που έχουν προσδιοριστεί

από τον Οργανισμό\* και να τους λαμβάνει υπόψη όταν παίρνονται αποφάσεις σχετικά με τις επί του πλοίου λειτουργίες.

- 3 Κατά την εφαρμογή του κανονισμού VIII/1 τα παρακάτω πρέπει να λαμβάνονται υπόψη:
  - .1 Διατάξεις που έχουν σκοπό την πρόληψη κόπωσης θα πρέπει να εξασφαλίζουν ότι δεν αναλαμβάνεται μακροχρόνια απασχόληση με υπερβολικό ή παράλογο αριθμό ωρών. Συγκεκριμένα, οι ελάχιστες χρονικές περίοδα ανάπαυσης, όπως καθορίζονται στο τμήμα Α-VIII/1, δεν θα πρέπει να ερμηνεύεται ότι υπονοούν πως όλες οι άλλες ώρες μπορούν να αφιερωθούν σε τήρηση φυλακής ή άλλα καθήκοντα.
  - .2 όπ η συχνότητα και η χρονική διάρκεια των αδειών, και η παροχή αδείας με αποδοχές, είναι ουσιαστικοί παράγοντες για την πρόληψη σώρευσης κόπωσης κατά τη διάρκεια κάπαιου χρονικού διαστήματος.
  - .3 οι διατάξεις μπορεί να ποικίλουν για πλοία που εκτελούν παράκπους πλόες, με την προϋπόθεση όπ υφίσταντα ειδικές ρυθμίσεις ασφαλείας.
    - 4 Εξαιρέσεις που προβλέπονται στο τμήμα Α-VIII/1,παράγραφος 9, πρέπει να ερμηνεύεται εξαιρέσεις που θεσπίζονται από την Σύμβαση ILO σχετικά με τις Ώρες Εργασίας Ναυτικών και την Επάνδρωση Πλοίων, 1996 (Νο 180) της Σύμβασης Ναυτικής Εργασίας, 2006, όταν τίθεται σε ισχύ. Οι περιπτώσεις υπό τις οποίες τέταιες εξαιρέσεις ισχύουν πρέπει να καθορίζονται από τα Συμβαλλόμενα Μέρη.
    - 5 Με βάση τις πληροφορίες που λαμβάνονται ως αποτέλεσμα της έρευνας ναυτικών ατυχημάτων, οι Αρχές θα πρέττει να αναθεωρούν τις διατάξεις τους που αφορούν την πρόληψη κόπωσης.

# Πρόληψη κατάχρησης φαρμάκων και αλκοόλ

6 Η κατάχρηση φαρμάκων και αλκοόλ άμεσα επηρεάζει την φυσική κατάσταση και ικανότητα ναυπκού να εκτελέσει τα καθήκοντα τήρησης φυλακής ή καθήκοντα που αφορούν την ασφάλεια, πρόληψη ρύπανσης και καθήκοντα ασφάλειας. Οι ναυπκοί που βρίσκονται υπό την επίρρεια φαρμάκων ή αλκοόλ δεν πρέπει να τους επιτρέπεται να εκτελούν καθήκοντα τήρησης φυλακής ή καθορισμένα καθήκοντα που αφορούν την ασφάλεια, την πρόληψη ρύπανσης και προστασία, έως να μην μειώνουν πλέον την ικανότητα εκτέλεσης εκείνων των καθηκόντων.

- 7 Η Διοίκηση πρέπει να διασφαλίζει ότι επαρκή μέτρα λαμβάνονται για να προλαμβάνεται η επίδραση του αλκοόλ και των φαρμάκων στην μείωση της ικανότητας του προσωπικού τήρησης φυλακής και εκείνων των οποίων τα καθήκοντα είναι καθορισμένα και αφορούν την ασφάλεια, την πρόληψητης ρύπανσης και την προστασία, και πρέπει να θεσπίζουν προγράμματα παρουσίασης ως απαραίτητα τα οποία:
  - .1 αναγνωρίζουν την κατάχρηση φαρμάκων και-αλκοόλ,
  - .2 σέβονται την αξιοττρέπεια, το απόρρητο, την εμπιστευτικότητα και τα θεμελιώδη νομικά δικαιώματα των εμπλεκόμενων ανθρώπων, και
  - .3 λαμβάνουν υπόψη τις σχετικές διεθνείς οδηγίες
- 8 Οι Εταιρείες πρέπει να εξετάζουν την εφαρμογή σαφής γραπτής πολιτικής πρόληψης κατάχρησης φαρμάκων και αλκοόλ, περιλαμβανομένης της απαγόρευσης κατανάλωσης αλκοόλ μέσα σε διάστημα τεσσάρων ωρών πριν την άσκηση τήρησης φυλακής είτε με συμπερίληψη στο σύστημα διαχείρισης παιότητας της εταιρείας ή μέσω παρεχόμενων αρκετών πληροφοριών και εκπαίδευσης στους ναυτικούς.
  - 9 Εκείναι που εμπλέκονται στη θέσπιση προγραμμάτων πρόληψης κατάχρησης φαρμάκων πρέπει να λαμβάνουν υπόψη τις οδηγίες που περιέχονται στην έκδοση του ILO, *Προγράμματα Πρόληψης Φαρ*-

<sup>\*</sup> Δείτε το παράρτημα στην απόφαση της Ολομέλειας ΙΜΟ Α. 772 (18) σχετικά με τον παράγοντα Κόπωσης στην επάνδρωση και ασφάλεια, παράγραφα 2 έως 4.4.1 και MSC/ Circ. 1014 σχετικά με Οδηγίες άμβλυνσης κόπωσης και διαχείριση

μάκων και Αλκοόλ στην Ναυτιλιακή Βιομηχανία (Εγχειρίδιο για οργανωτές)\*, όπως μπορεί να τροποπαηθεί.

#### Τμήμα Β-VIII/2

Οδηγίες όσον αφορά τις ρυθμίσεις τήρησης φυλακής και τις αρχές που πρέπει να τηρούνται.

1 Οι παρακάτω επιχειρησιακές οδηγίες θα πρέπει να λαμβάνονται υπόψη από εταιρείες, πλαιάρχους και αξιωματικούς τήρησης φυλακής.

## ΜΕΡΟΣ 1 - ΟΔΗΓΙΕΣ ΟΣΟΝ ΑΦΟΡΑ ΤΗΝ ΠΙΣΤΟΠΟΙΗΣΗ

(δεν υπάρχουν διατάξεις)

#### ΜΕΡΟΣ 2 - ΟΔΗΓΙΕΣ ΟΣΟΝ ΑΦΟΡΑ ΤΟΝ ΣΧΕΔΙΑΣΜΟ ΤΑΞΙΔΙΟΥ-

(δεν υπάρχουν διατάξεις)

# ΜΕΡΟΣ 3 – ΑΡΧΕΣ ΤΗΡΗΣΗΣ ΦΥΛΑΚΗΣ ΓΕΝΙΚΑ

(δεν υπάρχουν διατάξεις)

#### ΜΕΡΟΣ 4.- ΟΔΗΓΙΕΣ ΤΗΡΗΣΗΣ ΦΥΛΑΚΗΣ ΕΝ ΠΛΩ

# Μέρος 4.1 Οδηγίες όσον αφορά την τήρηση φυλακής ναυσιπλοΐας

#### Ε σαγωγή

- 2 Για ειδικούς τύπους πλοίων καθώς επίσης και για πλοία που μεταφέρουν επιβλαβή, επικίνδυνα, τοξικά ή πολύ εύφλεκτα φορτία μπορεί να είναι απαραίτητες συγκεκριμένες οδηγίες. Ο πλοίαρχος πρέπει κατά περίπτωση να παρέχει τις επιχειρησιακές οδηγίες.
- 3 Είναι ουσιώδες οι αξιωματικοί που είναι υπεύθυνοι φυλακής ναυσιπλοΐας αντιλαμβάνονται ότι η αποδοτική εκτέλεση των καθηκόντων τους είναι επ' ωφελεία της ασφάλειας της ζωής και περιουσίας στη θάλασσα και για τη πρόληψη ρύπανσης του θαλάσσιου περιβάλλοντος.

# Τήρηση φυλακής αγκυροβόλησης

- 4 Ο πλοΙαρχος κάθε πλοίου σε μη προφυλαγμένο αγκυροβόλιο, σε αναχτό αγκυροβόλι ή σε άλλες κατά ουσία εν πλω συνθήκες σύμφωνα με το κεφάλαιο VIII, τμήμα Α-VIII/2, μέρος 4-1, παράγραφος 51 του Κώδικα STCW, πρέπει να διασφαλίζει ότι οι ρυθμίσεις τήρησης φυλακήςείναι επαρκή για την τήρηση ασφαλούς φυλακής συνέχεια. Ένας αξιωματικός καταστρώματος πρέπει να διατηρεί ευθύνη ασφαλούς τήρησης φυλακής αγκυροβόλησης.
- 5 Κατά τον ορισμό ρυθμίσεων τήρησης φυλακής και συμμετρία με τη διατήρηση της ασφάλειας ο πλοίαρχος πρέπει να λαμβάνει υπόψη όλες τις σχετικές περιπτώσεις και συνθήκες όπως:
  - .1 διατήρηση συνεχούς κατάστασης επαγρύπνησης οπτικής και ακουστικής καθώς και με όλα τα διαθέσιμα μέσα,
  - .2 απαιτήσεις επικανωνίας από πλοίο σε πλοίο και από πλοίο με ξηρά,
  - .3 α υφιστάμενες συνθήκες καιρού, θάλασσας, πάγου,
  - .4 ανάγκη συνεχούς παρακολούθησης του στίγματος του πλοίου,
  - .5 φύση μέγεθος και χαρακτηριστικά αγκυροβολίου,
  - .6 συνθήκες κίνησης,

<sup>\*</sup> Παράρτημα ΙΙΙ αυτού του εγχειριδίου περιλαμβάνει «Κατευθυντήριες Αρχές ισχετικό με τις διαδικασίες Δοκιμής Φαρμάκων και Αλκοόλ για Εφαρμογή Παγκοσμίως στην Ναυπλιακή Βιομηχανία». Αυτές αι κτευθυντήριες αρχές μιοθετήθηκαν από την Ενιαία Επιτροπή ΙΕΟΛ/ΗΟ που αφορά την Υγεία Ναυτικών (Μάτος 1993)

- .7 καταστάσεις που μπορεί να επηρεάζουν την ασφάλεια του πλοίου,
- .8 επιχειρήσεις φόρτωσης και εκφόρτωσης,
- .9Ορισμός μελών πληρώματος σε αναμονή, και
- .10 διαδικασία επιφυλακής πλοιάρχου και τήρησης ετοιμότητας μηχανής.

# Μέρος 4-2 - Οδηγίες για την τήρηση φυλακής μηχανής

6 Ιδιαίτερες οδηγίες πιθανόν να είναι απαραίτητες για ειδικούς τύπους συστημάτων πρόωσης ή βοηθητικό εξοπλισμό και για πλοία που μεταφέρουν επιβλαβή επικίνδυνα, τοξικά ή πολύ εύφλεκτα υλικά ή άλλο ειδικό τύπο φορτίου. Ο πρώτος μηχανικός θα πρέπει να δίδει τις κατάλληλες οδηγίες.

7 Είναι ουσιώδες οι αξιωματικοί που είναι υπεύθυνοι της φυλακής μηχανής να αντιλαμβάνονται ότι η αποδοτική εκτέλεση των καθηκόντων τήρησης φυλακής μηχανής είναι απαραίτητη για την ασφάλεια της ζωής και περουσίας στη θάλασσα και για την πρόληψη της ρύπανσης του θαλάσσιου περιβάλλοντος.

8 Ο αντικαταστάτης αξιωματικός, προτού αναλάβει την ευθύνη της φυλακής μηχανής θα πρέπει:

- .1 να είναι εξαικειωμένος με τη θέση και χρήση του υπάρχοντος εξοπλισμού που αφορά την ασφάλεια της ζωής σε επιβλαβές ή τοξικό περιβάλλον,
- .2 να βεβαιωθεί ότι τα υλικά για την παροχή πρώτων βοηθειών σε κατάσταση ανάγκης είναι άμεσα διαθέσιμα, ιδιαίτερα εκείνα που απαιτούνται για την θεραπεία εγκαυμάτων και μολώπων, και
- .3 όταν βρίσκεται σε λιμάνι, σε ασφαλές αγκυροβόλιο ή προσδεδεμένο να γνωρίζει:
  - .3.1 τις δραστηριότητες στο φορτίο, το επίπεδο δραστηριοτήτων συντήρησης και επισκευών και όλες τις άλλες λειτουργίες που επιδρούν στη φυλακή, και
  - .3.2 τα βοηθητικά μηχανήματα που χρησιμοπαούνται για τις υπηρεσίες ενδιαίτησης επιβατών ή πληρώματος, εργασίες στο φορτίο, αξιοποιήσημες παροχές ύδατος και συστημάτων εξάτμεσης καυσαερίων.

# Μέρος 4-3 - Οδηγίες για την τήρηση φυλακής ραδιοεπικοινωνιών

#### Γενι κά

9 Μεταξύ άλλων, α Κανονισμοί Ραδιοεπικανωνιών απαιτούν όπως κάθε σταθμός ραδιοεπικανωνιών πλοίου θα διαθέτει άδεια, θα βρίσκεται υπό την δικαιοδοσία του πλαιάρχου ή άλλου υπεύθυνου ατόμου για το πλοίο και λειτουργεί υπό τον έλεγχο προσοντούχου προσωπικού. Απαιτείται επίσης από τους Κανονισμούς Ραδιοεπικανωνιών ότι ο συναγερμός κινδύνου θα εκπέμπεται μόνο κατόπιν εντολής του πλαιάρχου ή άλλου ατόμου υπεύθυνου για το πλοίο.

10 Ο πλοίαρχος θα πρέπει να έχει κατά νού ότι σε όλο το προσωπικό στο οποίο έχει δοθεί η ευθύνη εκπομπής συναγερμού κινδύνου πρέπει να δοθούν οδηγίες ως προς, και να γνωρίζουν, το σωστό χειρισμό, όλου του εξοπλισμού ραδιοεπικοινωνιών που διαθέτει το πλοίο όπως απαιτείται από τον κανονισμό Ι/14, παράγραφος 1.4. Αυτό θα πρέπει να καταγράφεται στο ημερολόγιο καταστρώματος ή στο ημερολόγιο ραδιοεπικοινωνιών.

#### Τήρηση Φυλακής

- 11 Εκτός των απαιτήσεων που αφορούν την τήρηση φυλακής ραδιοεπικανωνιών, ο πλοίαρχος κάθε αξιόπλου πλοίου πρέπει να εξασφαλίζει ότι:
  - .1 ο σταθμός ραδιοεπικοινωνιών του πλοίου είναι επαρκώς επανδρωμένος με σκοπό την ανταλλαγή γενικής φύσης επικοινωνιών ιδιαίτερα επικοινωνιών για το καινό, λαμβάνοντας υπόψη τους περιορισμούς που τίθενται από άλλα καθήκοντα εκείνων που είναι εξουσιοδοτημένα να τον χρησιμοποιούν, και

- .2 ο εξοπλισμός ραδιοετικανωνιών που υπάρχει στο πλοίο και, όπου υπάρχουν, αι εφεδρικές πηγές ενέργειας, διατηρούνται σε καλή κατάσταση λειτουργίας.
- 12 Περιοδικά, σε όλα τα αρμόδια μέλη του πληρώματος από το άτομο που έχει ορισθεί οπ έχει την πρωταρχική ευθύνη ραδιοεπικανωνιών κατά τη διάρκεια περισταστικών επείγοντος στον κατάλογο συγκέντρωσης ασφαλείας, θα πρέπει να δίνονται απαραίτητες οδηγίες και πληροφορίες όσον αφορά τη χρήση του εξοπλισμού ραδιοεπικανωνιών και διαδικασίες σε περιπτώσεις κινδύνου. Θα πρέπει να γίνεται επίσης, σχετική καταγραφή στο ημερολόγιο ραδιοεπικανωνιών.
- 13 Ο πλοίαρχος κάθε πλοίου που δεν υπόκατα στη Σύμβαση SOLAS 1974 ,θα πρέπα να απαιτεί η φυλακή ραδιοεπικανωνιών να τηρείται κανονικά όπως προσδιορίζεται από την Αρχή, λαμβάνοντας υπόψη τους Κανονισμούς Ραδιοεπικανωνιών.

#### Λα τουργικά

- 14 Προ του απόπλου αυτός που ορίσθηκε σαν χειριστής ραδιοεπικανωνιών έχοντας την πρωταρχική ευθύνη για τις ραδιοεπικανωνίες κατά τη διάρκεια περιστατικών επείγοντος, θα πρέπει να εξασφαλίζει ότι :
  - .1 όλος ο εξοπλισμός ραδιοεπικανωνιών επείγοντος και ασφαλείας και η εφεδρική πηγή ενέργειας βρίσκονται σε επαρκή λειτουργική κατάσταση και ότι αυτό καταγράφεται στο ημερολόγιο ραδιοεπικανωνιών,
  - .2 όλα τα έγγραφα που απαιτούνται από διεθνείς συμφωνίες, αγγελίες προς τους σταθμούς ραδιοεπικαινωνιών πλοίων και όλα τα πρόσθετα έγγραφα που απαιτούνται από την Αρχή είναι διαθέσιμα και διορθωμένα σύμφωνα με τις τελευταίες αλλαγές, και κάθε ασυμφωνία αναφέρεται στον πλοίαρχο,
  - .3 το ρολά στο θάλαμο ραδιοεπικανωνιών έχει ρυθμισθεί σωστά ως προς τα πρότυττα σήματα χρόνου,
  - .4 οι κεραίες έχουν τοποθετηθεί σωστά, δεν έχουν υποστεί βλάβη και είναι σωστά συνδεδεμένες, και
  - .5 στην έκταση που είναι πρακτικά δυνατόν, λαμβάνονται μηνύματα ρουτίνας ναυσιπλαικών προειδοπαιήσεων και καιρού για την περιοχή στην οποία πρόκεται να πλεύσει το πλοίο, μαζί με εκείνα άλλων περιοχών που απαιτούνται από τον πλοίαρχο, και ότι τέταιας φύσης μηνύματα προωθούνται στον πλοίαρχο.

15 Κατά τον απόπλου και με το άναιγμα του σταθμού ο χειριστής ραδιοεπικανωνιών θα πρέπει:

- .1 να κάνει ακρόαση στις κατάλληλες συχνότητες κινδύνου για πιθανά σήματα κινδύνου, και
- .2 να στείλει αναφορά απόπλου (όνομα, στίγμα και προορισμό κ.λ.π.) στον τοπικό παράκτιο σταθμό και σε όπαιον άλλο κατάλληλο παράκτιο σταθμό από τον οποίο αναμένονται γενικής φύσης ραδιοεπικανωνίες.
- 16 Ενώ ο σταθμός παραμένει ανακτός, ο χειριστής ραδιοετικανωνιών θα πρέπει:
  - .1 να ελέγχει το ρολά στο θάλαμο ραδιοεπικανωνιών ως προς τα πρότυπα σήματα χρόνου τουλάχιστον μία φορά την ημέρα,
  - .2 να στέλνει αναφορά κίνησης όταν εισέρχεται και εξέρχεται από την περιοχή εξυπηρέτησης ενός παράκπου σταθμού από τον οποίο αναμένονται ενδεχομένως γενικής φύσης ραδιοεπικανωνίες, και
  - .3 να εκπέμπει αναφορές σε συστήματα αναφοράς πλοίων με τις οδηγίες του πλαάρχου,
- 17 Κατά την διάρκεια του πλου ο καθορισθείς χειριστής ραδιοεπικανωνιών έχοντας την πρωταρχική ευθύνη των ραδιοεπικανωνιών κατά τη διάρκεια περιστατικών κινδύνου θα πρέπει να εξασφαλίζει την σωστή λειτουργία των:
  - - .2 εξοπλισμού ραδιοεπικανωνιών επείγοντος και ασφαλείας πραγματοπαιώντας δοκιμή τουλάχιστον μία φορά την ημέρα αλλά χωρίς να εκπέμπεται σήμα.

Τα αποτελέσματα αυτών των δοκιμών θα πρέπει να καταγράφονται στο ημερολόγιο ραδιοεπικαινωνιών.

- 18 Ο χειριστής ραδιοεπικανωγιών που ορίσθηκε να χειρίζεται γενικής φύσης επικανωνίες θα πρέπει να εξασφαλίζει ότι τηρείται αποτελεσματική φυλακή σε εκείνες τις συχνότητες στις οποίες είναι πιθανόν να γίνει ανταλλαγή επικανωνιών, έχοντας υπόψη το στίγμα του πλοίου ως προς εκείνους τους παράκτιους σταθμούς και επίγειους παράκτιους σταθμούς από τους οποίους ενδεχομένως αναμένονται επικανωνίες. Οταν πραγματοπαιείται ανταλλαγή μηνυμάτων, οι χειριστές ραδιοεπικανωνιών πρέπει να τηρούν τις σχετικές συστάσεις της Διεθνούς Ενώσεως Τηλεπικανωνιών.
- 19 Όταν πρόκειται να κλείσει ο σταθμός κατά τον κατάπλου του πλοίου σε λιμάνι, ο χειριστής ραδιοεπικανωνών που εκτελεί φυλακή θα πρέπει να ενημερώσει τον τοπικό παράκτιο σταθμό και άλλους παράκτιους σταθμούς με τους οποίους τηρούσε επαφή σχετικά με τον κατάπλου του πλοίου και το κλείσιμο του σταθμού.
- 20 Όταν κλείσει το σταθμό ραδιοεπικοινωνιών ο χειριστής ραδιοεπικοινωνιών που έχει ορισθεί ότι έχει την πρωταρχική ευθύνη ραδιοεπικοινωνιών κατά την διάρκεια περιστατικών επείγοντος θα πρέπε:
  - .1 να εξασφαλίζει ότι οι κεραίες εκπομπής είναι γειωμένες, και
  - .2 να ελέγξει ότι οι εφεδρικές πηγές ενέργειας είναι επαρκώς φορτισμένες.

# Συναγερμός κινδύνου και διαδικασίες

- 21 Ο συναγερμός ή κλήση κινδύνου έχει απόλυτη προτεραιότητα σε σχέση με όλες τις άλλες εκπομπές. Όλα α σταθμοί που λαμβάνουν τέτοια σήματα απαιτείται από τους Κανονισμούς Ραδιοεπικανωνιών να σταματήσουν άμεσα όλες τις εκπομπές που είναι δυνατόν να παρεμβάλουν τις επικανωνίες κινδύνου.
- 22 Σε περίπτωση κινδύνου του ιδίου πλοίου ο χειριστής ραδιοεπικοινωνιών που έχει ορισθεί ότι έχει τη πρωταρχική ευθύνη των ραδιοεπικοινωνιών κατά τη διάρκεια περιστατικών κινδύνου πρέπει να αναλάβει άμεσα τα καθήκοντα του τηρώντας τις διαδικασίες του Κανονισμού Ραδιοεπικοινωνιών και τις σχετικές Συστάσεις της ITU-R.
- 23 Όταν γίνει λήψη συναγερμού κινδύνου:
  - .1 ο χειριστής ραδιοεπικανωνιών που εκτελεί φυλακή θα πρέπει να ειδοπαιήσει τον πλοίαρχο και, αν πρέπει, τον χειριστή ραδιοεπικανωνιών που έχει ορισθεί όπι έχει την πρωταρχική ευθύνη των ραδιοεπικανωνιών κατά τη διάρκεια περιστατικών επείγοντος, και
  - .2 ο χειριστής ραδιοεπικανωνιών που έχει ορισθεί ότι έχει την έχει την πρωταρχική ευθύνη των ραδιοεπικοινωνιών κατά τη διάρκεια περιστατικών επείγοντος θα πρέπει να αξιολογήσει την κατάσταση καί να αναλάβει άμεσα καθήκοντα καθήκοντα τηρώντας τις διαδικασίες του Κανονισμού Ραδιοεπικαίνων νιών και των σχετικών Συστάσεων της ITU-R.

#### Μηνύματα επείγοντος

- 24 Σε περιπώσεις επείγοντος του ιδίου πλοίου, ο χειριστής ραδιοεπικανωνιών που έχει ορισθεί όπι έχει την ευθύνη των ραδιοεπικανωνιών κατά τη διάρκεια περιστατικών επείγοντος θα πρέπει άμεσα να αναλάβει άμεσα καθήκοντα καθήκοντα τηρώντας τις διαδικασίες του Κανονισμού Ραδιοεπικανωνιών και των σχετικών Συστάσεων της ΙΤυ-R
- 25 Σε περιπτώσεις επικανωνιών που σχετίζονται μετατρικές οδηγίες, ο χειριστής ραδιοεπικανωνιών που έχει ορισθεί ότι έχει την πρωταρχική ευθύνη των ραδιοεπικανωνιών κατά τη διάρκεια περισταπικών επείγοντος θα πρέπει να ακολουθεί τις διαδικασίες των Κανονισμών Ραδιοεπικανωνιών και να συμμορφούται με τις διαδικασίες που έχουν εκδοθεί στα σχετικά διεθνή έντυπα (βλέπε παράγραφο 14.2 ή όπως ορίζεται από τον παροχέα δορυφορικών επικανωνιών).
- 26 Σε περιπτώσεις επικανωνιών σχεπικών μετατρική μεταφορά, όπως ορίζεται στο Παράρτημα 1 του Πρωτοκόλου της Συνθήκης της Γενεύης της 12ης Αυγούστου 1949 σχεπικά με την προστασία θυμάτων από διεθνείς ένοπλες συγκρούσεις (Πρωτόκολο 1), ο χειριστής ραδιοεπικανωνιών που έχει ορισθεί να έχει την ευθύνη των ραδιοεπικανωνιών σε περιπτώσεις κινδύνου θα πρέπει να ακολουθεί τις διαδικασίες των Κανονισμών Ραδιοεπικανωνιών.

27 Εάν ληφθεί σήμα επείγοντος, ο χαριστής ραδιοεπικοινωνιών φυλακής θα πρέπα να ενημερώνα τον πλοίσρχο και, εάν απαιτείται τον χαριστή ραδιοεπικοινωνιών που έχαι ορισθεί όπι έχαι την πρωταρχική ευθύνη σε περίπτωση κινδύνου.

#### Μηνύματα ασφαλείας

- 28 Οταν πρέπει να εκπεμφθεί μήνυμα ασφαλείας, ο πλοίαρχος και ο χειριστής ραδισεπικανωνιών φυλακής θα ακολουθούν τις διαδικασίες των Κανονισμών Ραδισεπικανωνιών.
- 29 Εάν ληφθεί μήνυμα ασφαλείας, ο χειριστής ραδιοεπικανωνιών φυλακής θα πρέπει να σημειώνει το περιεχόμενό του και να ενεργεί σύμφωνα με τις οδηγίες του πλαιάρχου.
- 30 Επικανωνίες γέφυρα με γέφυρα θα πρέπει να εκτελούνται στο κανάλι 13 του VHF. Επικανωνίες γέφυρα με γέφυρα ορίζονται σαν «επικανωνίες ασφαλείας της ναυσιπλοΐας μεταξύ πλοίων» στους Κανονισμούς Ραδιοεπικανωνιών.

#### Ημερολόγιο επικανωνιών

- 31 Πρόσθετες εγγραφές στο ημερολόγιο ραδιοεπικοινωνιών πρέπει να γίνονται σύμφωνα με τις παραγράφους 10, 12, 14, 17 και 33.
- 32 Εκπομπές από μή εξουσιοδοτημένα πρόσωπα και περιστατικά επιβλαβών παρεμβολών θα πρέπει, εάν είναι δυνατόν, να αναγνωρίζονται, καταγράφονται στο ημερολόγιο ραδιοεπικανωνιών και να ενημερώνεται η Αρχή σύμφωνα με τους Κανονισμούς Ραδιοεπικανωνιών, μαζί με κατάλληλο αντίγραφο του ημερολογίου ραδιοεπικανωνιών.

### Συντήρηση συσσωρευτών

- 33 Οι συσσωρευτές που παρέχουν ενέργεια σε οποιοδήποτε τμήμα της εγκατάστασης ραδιοεπικοινωνιών κα εκείνοι που έχουν σχέση με διατάξεις αδιαλείπτου παροχής ισχύος είναι στην ευθύνη του χειριστή ραδιοεπικοινωνιών που έχει την άμεση ευθύνη σε περιπτώσεις κινδύνου και θα πρέπε:
  - .1 να δοκιμάζονται με και άνευ φορτίου καθημερινά και, όπου απαιτείται, να τηρούνται σε κατάσταση πλήρους φόρτισης,
  - .2 να ελέγχονται με την βοήθεια υδρομέτρου όπου είναι δυνατόν ή όπου δέν μπορεί να χρησιμοποιηθεί υδρόμετρο, με κατάλληλο όργανο μέτρησης φορτίου, και
  - .3 να ελέγχονται μιά φορά τον μήνα για την ασφάλεια κάθε συσσωρευτή και τις συνδέσεις τους και την κατάσταση των συσσωρευτών και των δοχείων τους.

Τα αποτελέσματα αυτών των δοκιμών θα πρέπει να καταγράφονται στο ημερολόγιο ραδιοεπικανωνιών.

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ΜΕΡΟΣ 5 - ΟΔΗΓΙΕΣ ΓΙΑ ΤΗΡΗΣΗ ΦΥΛΑΚΗΣ ΣΤΟΝ ΛΙΜΕΝΑ