

**Translation: Only the Danish version is authentic**

*Order no. 1325 of 17 December 2012 issued by  
the Danish Agency for Higher Education and Educational Support*

## **Order on the training programme for master (home trade)**

In pursuance of section 12(1) and section 13(1) of the act on maritime training programmes (*lov om maritime uddannelser*), cf. consolidated act no. 207 of 4 March 2011, as amended by act no. 478 of 30 May 2012, the following provisions are laid down:

### **Part 1**

#### *Purpose of the training programme*

**Section 1.** The purpose of the training programme for master (home trade) is to qualify the student for functioning as a mate on board merchant ships below 500 GT engaged in home trade as well as for being capable of acquiring competency as a master on ships below 500 GT engaged in home trade after having acquired the necessary duration of service.

*Subsection 2.* The training programme for master (home trade) shall meet the requirements of the International Convention on Standards of Training, Certification and Watchkeeping (the STCW Convention), as amended, so that it is possible to issue certificates pursuant to part II/3 of the Convention.

### **Part 2**

#### *Objective of the training programme*

**Section 2.** The training programme for master (home trade) is graded at level 3 in the Danish qualification framework for lifelong learning.

*Subsection 2.* The training programme shall develop the student focusing on management, safety and operation optimisation.

**Section 3.** The objective of the learning outcomes includes the knowledge, the skills and the competences that a master (home trade) is to acquire from the training programme.

*Subsection 2.* The learning objective related to knowledge is that the master (home trade) has

- 1) knowledge about the general design and equipment of ships below 500 GT;
- 2) basic knowledge of mechanical engineering operation in ships with a propulsion power below 750 kW engaged in home trade;
- 3) an understanding of navigation, watchkeeping and meteorology in relation to the operation of ships engaged in home trade;
- 4) an understanding of the factors affecting a ship's stability and how to assess a ship's stability;
- 5) knowledge of principles of operational, wage and ship accounting;
- 6) knowledge of the relevant international conventions and Danish legislation in the area;
- 7) knowledge of protection of the marine environment; and

- 8) knowledge of entrepreneurship in the form of basic concepts related to the start and operation of independent business and inspiration for developing new work processes.

*Subsection 3.* The learning objective related to skills is that the master (home trade) can

- 1) carry out practical tasks on ships engaged in home trade;
- 2) organise cargo handling and stowage in ships below 500 GT engaged in home trade;
- 3) operate ship's machinery (up to 750 kW) in an appropriate manner in terms of safety;
- 4) perform the bridge and watchkeeping duty on board ships below 500 GT engaged in home trade;
- 5) master English technical terms in oral and written communication within the fields of ship and watchkeeping duty and other maritime disciplines;
- 6) retrieve and assess information in connection with a practical task on a ship engaged in home trade;
- 7) develop and use procedures benefitting personal safety as well as the general safety of the ship;
- 8) use the ship's safety muster lists in both Danish and English; and
- 9) perform the function as a fire leader.

*Subsection 4.* The learning objective related to competences is that the master (home trade) can

- 1) independently perform the function as a watchkeeping navigator and as a master of ships below 500 GT engaged in home trade;
- 2) perform the management tasks related to the function as a mate and master of ships below 500 GT engaged in home trade;
- 3) assume responsibility for the ship's fire safety;
- 4) perform the function as the person responsible for safety and the environment in ships below 500 GT engaged in home trade; and
- 5) assume the responsibility for environmentally sound ship operation, including energy efficient operation and reduction of emissions from ships.

*Subsection 5.* After having completed the training programme, the student shall meet the requirements of the STCW Convention in accordance with the qualification requirements of the Danish Maritime Authority hereon regarding

- 1) watchkeeping on the bridge, including full mission training, cf. table A-II/1 of the STCW Code;
- 2) automatic radar plotting aids (ARPA), cf. table A-II/1 of the STCW Code;
- 3) electronic chart display and information system (ECDIS), cf. table A-II/3 of the STCW Code;
- 4) Restricted Operator's Certificate (ROC) in accordance with the Global Maritime Distress and Safety System (GMDSS), cf. regulation IV/2 of the STCW Convention;
- 5) fire-fighting on ships, cf. regulation VI/3 of the STCW Convention;
- 6) operation of lifeboats, liferafts and rescue boats, cf. regulation VI/2, paragraph 1, of the STCW Convention;
- 7) security preparedness and special security tasks in ships, cf. regulation VI/6, paragraph 4, of the STCW Convention;
- 8) maritime medical examiner training programme for medicine chest category B; and
- 9) certificate of proficiency in motor operation.

### Part 3

#### *Arrangement of the training programme*

**Section 4.** The training programme shall be arranged with an increasing degree of difficulty and complexity through the education.

*Subsection 2.* New national and international knowledge and new methods of relevance to masters (home trade) shall be incorporated into the teaching.

*Subsection 3.* The teaching shall be arranged so that correlation is created between theory and the practical experience gained from the student's duration of service.

*Subsection 4.* Varied study forms shall support the student's development of independence and interpersonal skills as well as his ability to be innovative.

*Subsection 5.* The training programme shall be arranged with inter-disciplinary elements simulating situations and activities that the master (home trade) may encounter in his everyday working life.

**Section 5.** The training institution shall be responsible for carrying out the training programme in its entirety, including any outsourced teaching.

### Part 4

#### *Duration of the training programme*

**Section 6.** The official length of the training programme for master (home trade) is 0.5 student full time, corresponding to 30 credits in the European Credit Transfer System (ECTS credits).

**Section 7.** The training programme shall be completed within a year and a half.

*Subsection 2.* The training institution may, when justified by special conditions, grant exemptions from the time-limit stipulated in subsection 1.

**Section 8.** Leave applied for shall be accepted if reasoned by maternity/paternity leave, adoption, documented illness, military service, UN service or the like.

### Part 5

#### *Admission and acquisition of certificates*

**Section 9.** The training institution shall admit the students to the training programme for master (home trade) and ensure that they meet the admission requirements.

*Subsection 2.* In order to be admitted to the training programme for master (home trade), the applicant shall:

- 1) have completed the basic course for ship's assistants combined with 12 months' duration of service as an apprentice mate or 18 months' duration of service as an ordinary ship's assistant;
- 2) have completed the final course for ship's assistants combined with 15 months' duration of service as an ordinary ship's assistant;

- 3) have completed vocational training within the iron and metal industries and the ship's assistant training programme for persons holding a certificate of apprenticeship combined with 12 months' duration of service as a ship's assistant;
- 4) have completed a training programme as a ship's mechanist; or
- 5) have acquired 36 months' relevant duration of service in merchant ships with a gross tonnage of or above 20 before 1 February 2002 as well as have completed approved basic training meeting the requirements of regulation VI/1 of the STCW Convention and section A-VI/1, paragraph 2, of the STCW Code on "Basic Training".

*Subsection 3.* In order to be admitted to the training programme for master (home trade), the applicant shall furthermore:

- 1) hold a valid health certificate for seafarers and fishermen without limitations;
- 2) be fit for lookout duty;
- 3) hold a watchkeeping certificate; and
- 4) have completed practical training during the duration of service as described in a training record book approved by the Danish Agency for Higher Education and Educational Support; however, not as regards persons covered by subsection 2(5).

*Subsection 4.* A person admitted to the training programme for skipper (3<sup>rd</sup> class) on fishing vessels may, at the same time, participate in the training programme for master (home trade), irrespective of whether the necessary duration of service in merchant ships has been acquired.

## Part 6

### *Course regulations*

**Section 10.** The training institution shall, in the course regulations, stipulate the regulations and guidelines governing the arrangement and implementation of the teaching. The course regulations shall contain a description of how the training institution, when arranging the training programme, meets part 3 of this order, the contents stipulated in annex 1 as well as the requirements of the STCW Convention so that it is possible to issue certificates pursuant to parts II/3 of the Convention.

*Subsection 2.* Furthermore, the course regulations shall contain provisions on the following:

- 1) the purpose of the training programme;
- 2) the structure and arrangement of the training programme, including modules and ECTS credits;
- 3) types of teaching and cooperation;
- 4) cooperation with the industry and other training institutions;
- 5) syllabuses;
- 6) examinations and the types of evaluation used;
- 7) study activity;
- 8) credit transfer;
- 9) leave; and
- 10) exemptions.

*Subsection 3.* It shall be evident from the course regulations that the institution may grant exemptions from the provisions in the course regulations that have been laid down solely by the institution as such.

*Subsection 4.* It is presupposed that the course regulations and important amendments hereof are drawn up by acquiring inspiration from the two sides of industry.

**Section 11.** Course regulations and important amendments hereof shall enter into force at the start of a semester.

*Subsection 2.* Course regulations and important amendments hereof shall contain interim provisions.

*Subsection 3.* The course regulations in force shall be available from the webpage of the institution and documented in the quality assurance system of the training institution.

## Part 7

### *Examination and examination certificates*

**Section 12.** As regards examinations and evaluations, reference is made to the order on the holding of tests and the evaluation of students at the maritime training programmes in force (the examination order).

*Subsection 2.* The training institution shall issue exam certificates when:

- 1) the student has completed the entire training programme;
- 2) passed the final exams; and
- 3) acquired the duration of service required to acquire a certificate of competency where the exam certificate is required.

*Subsection 3.* A person who has, pursuant to section 9(4), completed the training programme for master (home trade) may be issued with a statement certifying that he has passed the exam, though he has not acquired the necessary duration of service.

*Subsection 4.* Following the acquisition of sufficient duration of service on merchant ships, it shall be possible to convert the statement into an exam certificate so that it can form the basis of the issuance of a certificate of competency to merchant ships.

## Part 8

### *Teacher qualifications*

**Section 13.** The teachers shall, in general, have a level of qualification higher than the exit level for the training programmes. Qualification level shall mean educational competence and documented theoretical, expert and professional competence.

*Subsection 2.* New teachers shall, within the first three years of employment, have passed a relevant adult education training programme corresponding to 30 ECTS credits, which may be acquired through a combination of theoretical teaching and follow-up at their own training institution.

Part 9  
*Other provisions*

**Section 14.** Decisions made by the training institutions in accordance with this order may be brought before the Danish Agency for Higher Education and Educational Support by the one affected by the decision, cf. the order on complaints related to the act on maritime training programmes, as amended. The complaint shall be submitted to the training institution, which shall send on the complaint to the Danish Agency for Higher Education and Educational Support accompanied by a statement. The training institution shall give the plaintiff an opportunity to comment on the statement within a time-limit of at least one week. Any comments from the plaintiff shall accompany the complaint when sent to the Danish Agency for Higher Education and Educational Support.

*Subsection 2.* The time-limit for filing complaints under subsection 1 shall be two weeks from the day when the plaintiff was informed of the decision.

*Subsection 3.* Decisions made by the Danish Agency for Higher Education and Educational Support pursuant to this order shall not be brought before any higher administrative authority.

**Section 15.** The Danish Agency for Higher Education and Educational Support may allow deviations from the order as part of experiments. At the same time, the duration and reporting form of the experiment shall be determined.

*Subsection 2.* The Danish Agency for Higher Education and Educational Support may grant exemptions from the order when special conditions give reason for this.

Part 10  
*Entry into force and interim provisions*

**Section 16.** This order shall enter into force on 1 January 2013.

*Subsection 2.* Students who have initiated the training programme before 31 December 2012 may complete the training programme in accordance with the provisions in force until now.

*Subsection 3.* The training institutions shall arrange for the necessary interim programs for students mentioned in subsection 2 who want to finalise their training programme according to this order.

*Danish Agency for Higher Education and Educational Support, 17 December 2012*  
Inge Mærkedahl / Sune Rahn

## Description of the contents of the training programme for master (home trade)

### Navigation and watchkeeping service (10 ECTS credits)

The student shall, through the instruction in navigation, watchkeeping and meteorology be qualified to function as a mate and master in home trade and be able to function as a watchkeeping engineer officer in ships where there is no engine crew.

#### *Subject: Navigation*

**Test requirements:** Exam.

#### **Central themes:**

- 1. Positioning** – determine the ship's position using distinctive marks at sea and ashore, reckoning and shipboard navigation equipment in home trade.
- 2. Navigation equipment** – use of magnetic and gyro compasses, including the determination of indication errors in these; radar and ECDIS, including ARPA, use of common navigation equipment for ships engaged in home trade.
- 3. Charts and manuals** – maintaining the stock of charts and manuals, including electronic updating (ECDIS), planning and carrying out the ship's safe voyage, information about the use of ship's logs, aids to navigation in accordance with IALA A and IAMSAR, tidal conditions.
- 4. Manoeuvring** – ships' manoeuvring characteristics and abilities, mooring and anchoring under various conditions, including the rescue situation.

#### *Subject: Watchkeeping*

**Test requirements:** Exam.

#### **Central themes:**

- 1. Regulations for preventing collisions at sea** – international regulations for preventing collisions at sea, special national regulations, including safe navigation in Danish waters.
- 2. Collision prevention** – radar and ARPA taking full account of the international regulations for preventing collisions at sea and the watchkeeping order, situational assessment and carrying out manoeuvres for preventing collisions.
- 3. Watchkeeping procedures** – the watchkeeping order, checklists, procedures and instructions, full mission bridge training, cf. the qualification requirements in force.
- 4. Communication** – distress and rescue signals, ship reporting systems and VTS.

***Subject: Meteorology***

**Test requirements:** Internal test.

**Central themes:**

- 1. Weather systems** – characteristics of relevant weather systems in the home trade area.
- 2. Retrieval of information** – common meteorological instruments and relevant meteorological information, retrieval of meteorological information.
- 3. Voyage planning** – special meteorological conditions for areas in home trade necessary for planning and carrying out the ship's safe voyage.

**ADMINISTRATION, MANAGEMENT AND COMMUNICATION (6 ECTS credits)**

***Subject: Maritime law and administration***

The student shall, through the instruction in the provisions of the seamen's act and the merchant shipping act, qualify to function as a mate and master on board ships up to 500 GT engaged in home trade. This means that the student shall be able to understand common instructions and fill in pre-printed forms in accordance with written guidance and draw up reports and notes that masters of these ships shall be capable of filling in.

**Test requirements:** Internal test.

**Central themes:**

- 1. Employment law** – the provisions of the seamen's act on service contracts, the ship service, disputes about conditions of service and penalty provisions as well as conditions related to occupational injuries.
- 2. Maritime law and the obligations of the master** – inward and outward clearance in the home and local trade area, cargo documents and maritime inquiries.
- 3. Technical operation and administration** – survey, ships' tonnage measurement and certification in accordance with international conventions.
- 4. General administration** – filling in forms and written reports and informing about written guidelines.
- 5. Entrepreneurship** – entrepreneurship, innovation and the development of new methods for performing the profession.
- 6. Computers** – the use of administrative computer programmes on board the ship as well as information retrieval and ship-to-shore communication.



***Subject: English***

The student shall, through the instruction in maritime English, qualify to be able to understand common written guidelines and instructions as well as to be able to communicate orally about the daily service on board, including watchkeeping duty, safety and occupational health.

**Test requirements:** Exam.

**Central themes:**

**1. Maritime English** – IMO's maritime standard phrases, maritime English for use to acquire a Restricted Operator's Certificate (ROC) in GMDSS.

**2. Safety communication** – safety muster lists, safety information and markings, escape routes and alarm signals.

***Subject: Communication***

The student shall, through the instruction in communication, qualify to be able to carry out the radio communication occurring in connection with a bridge watch.

**Test requirements:** Exam as well as a completed course in Restricted Operator's Certificate (ROC), cf. the qualification requirements in force.

**Safety, health and maritime security (7 ECTS credits)**

***Subject: Safety and environmental protection***

The student shall, through the instruction in safety and environmental protection, qualify to perform the function as the person having the safety and environmental responsibility on board a ship engaged in home trade.

**Test requirements:** Internal test.

**Central themes:**

**1. Environmentally sound ship operation and pollution prevention** – pollution prevention, including relevant procedures, protection of the surrounding environment.

**2. Maritime safety management** – arranging and carrying out instructions of those on board, including the use of emergency and safety equipment as well as personal protective equipment as well as maintenance hereof, planning and carrying out safety drills on board.

**3. Operation of lifeboats, liferafts and rescue boats** – planning and carrying out safety drills on board.

**4. The ISM Code, occupational health and pollution prevention** – ISM (International Safety Management), occupational health on board, elementary practical knowledge about safe ship operation and prevention of pollution from ships.

**5. Maritime security** – security plan and security preparedness, risks and measures, cf. the qualification requirements in force, knowledge about the conditions when being taken hostage and the effects hereof.

***Subject: Fire-fighting and fire management***

The student shall, through the instruction in fire-fighting, qualify to be able to operate and maintain the ship's fire-fighting and smoke-diver's equipment in accordance with the guiding manuals available. Furthermore, the student shall be able to function as a fire leader on board a ship.

**Test requirements:** Completed course in fire-fighting for ships, cf. the qualification requirements in force.

**Central themes:**

**1. Organisation of fire-prevention** – assessment of the fire-prevention in relation to work situations, ensuring appropriate handling of combustible substances and naked fire.

**2. Instructions concerning fire preparedness** – drawing up, maintaining and presenting instructions to the crew.

**3. Fire-fighting and evaluation of the fire preparedness** – planning, organising and managing fire-fighting as well as subsequent evaluation and improvement of the fire preparedness.

***Subject: Medical examiner training programme***

The student shall, through the medical examiner training programme, qualify to be able to function as a medical examiner on board ships that shall be provided with a medicine chest category B.

**Test requirement:** Completed medical examiner training programme for medicine chest category B, cf. the qualification requirements in force.

**Ship construction (7 ECTS credits)**

***Subject: Ship construction and cargo handling***

The student shall, through the instruction in ship construction, cargo handling and stowage, qualify to function as and have the responsibility as a mate and master on ships, including through instruction in international maritime conventions, especially SOLAS, MARPOL and the International Convention Load Line Convention, and be able to use these regulations in connection with practical problems.

**Test requirements:** Exam.

**Central themes:**

**1. The construction of ship types** – arrangement, equipment and characteristics.

**2. Stability** – centre of gravity, centre of buoyancy, draught and trim as well as calculation of the ship's position on the water, factors affecting a ship's stability, including the effects of the wind, the sea and free liquid surfaces.

**3. Stresses on the ship and its equipment** – assessment of whether the ship or parts of its equipment will be overloaded in case of local stresses.

**4. Corrosion of the ship and its equipment** – the effect of corrosion on the ship's seaworthiness, assessment of the corrosion as well as planning the corrosion protection on board.

**5. Cargo handling in general and where the cargo constitutes a safety or environmental risk** – loading, unloading, stowage, securing and storing the cargo in accordance with procedures as well as carrying out the necessary instructions of those on board, including on the use of safety and protection equipment.

**6. International regulations on dangerous goods** – the IMDG Code, the IMSBC Code, and their practical application.

***Subject: Mechanical engineering***

The student shall, through the instruction in mechanical engineering, qualify to be able to perform the operation of ship machinery of up to 750 kW on board ships where there is no requirement for an engine crew.

**Test requirements:** Internal test as well as test for certificate of proficiency in motor operation, cf. the qualification requirements in force.