

Pixi Book

for
Training Officers
for Ordinary Ship's
Assistants



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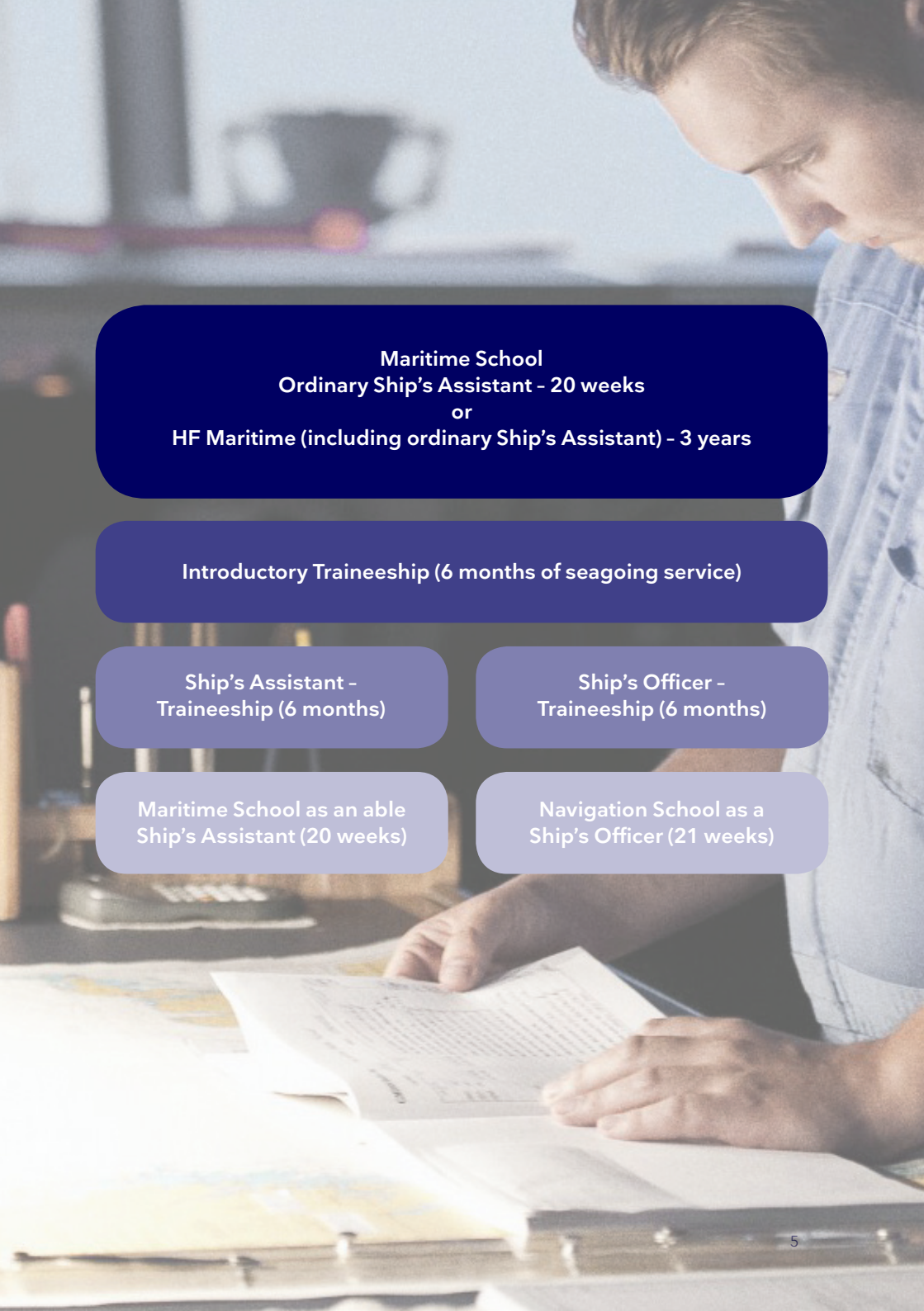
Preface

The Pixi book for training officers for ordinary ship's assistants is primarily comprised of excerpts from the Danish "Executive order on the basic maritime programme" and "Training Record Book for Seagoing Service: Ship's Assistant, Watchkeeping Officer's Examination, Ship's Officer's Examination, Master's Examination Limited and Master's Examination Unlimited". The excerpts have been selected according to their relevance to training officers. The Pixi book has been written to serve as a brief introduction to the responsibilities of training officers.

Reading Guide

The standard duration of the basic maritime programme is 3 years. The traineeship period entails 12 months of effective seagoing service. After the first 6 months, the trainee can decide whether the basic maritime programme should lead to the ship's assistant programme or Ship's Officer programme. Accordingly, this Pixi book is divided into two different sections for the traineeship component; one for the ship's assistant programme in the section The Traineeship (Ship's Assistant) and one for the Ship's Officer programme in the section The Traineeship (Ship's Officer). The two sections are identical in many respects and only differ in terms of the last 6 months of seagoing service during the programme.

Following those sections is information about student activities during the traineeship periods and the responsibilities of the training officer. These apply to the basic maritime programme no matter which line of study the student pursues.



**Maritime School
Ordinary Ship's Assistant - 20 weeks
or
HF Maritime (including ordinary Ship's Assistant) - 3 years**

Introductory Traineeship (6 months of seagoing service)

**Ship's Assistant -
Traineeship (6 months)**

**Ship's Officer -
Traineeship (6 months)**

**Maritime School as an able
Ship's Assistant (20 weeks)**

**Navigation School as a
Ship's Officer (21 weeks)**



Purpose of the Programme

The basic maritime programme is intended to give persons who wish to work in the maritime sector a foundational theoretical and practical vocational education. The aim of the programme is to enable them to carry out practical work on deck and in the engine room in a safe manner. Upon completion of the basic maritime programme, the seafarer (student) will be either go on to take the ship's assistant examination or a Ship's Officer examination. The basic maritime programme results in a degree as either an able ship's assistant or Ship's Officer.

Purpose of the Ship's Assistant Programme

The ship's assistant programme must meet the requirements of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (the STCW Convention), Regulation VI/1 on basic safety training and the theoretical elements of Regulation II/4 on watchkeeping.

The objective of the programme is also to provide students with training to fulfil the requirements specified in chapters II/5, III/5 and III/7 of the STCW Convention, limited to competences based on normal operating conditions and routine tasks in connection with the ship's operation.

Purpose of the Ship's Officer Programme

The purpose of the Ship's Officer programme is to qualify the student to work as a watchkeeping officer on merchant vessels of 500 gross tonnage or less in short-sea shipping and, after the required length of seagoing service has been met, be able to gain maritime certificates of competency as a shipmaster for seagoing vessels of 500 gross tonnage or less in short-sea shipping. The student must also meet the requirements of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (the STCW Convention) so that a certificate can be issued in accordance with Chapter II/3 of the convention.



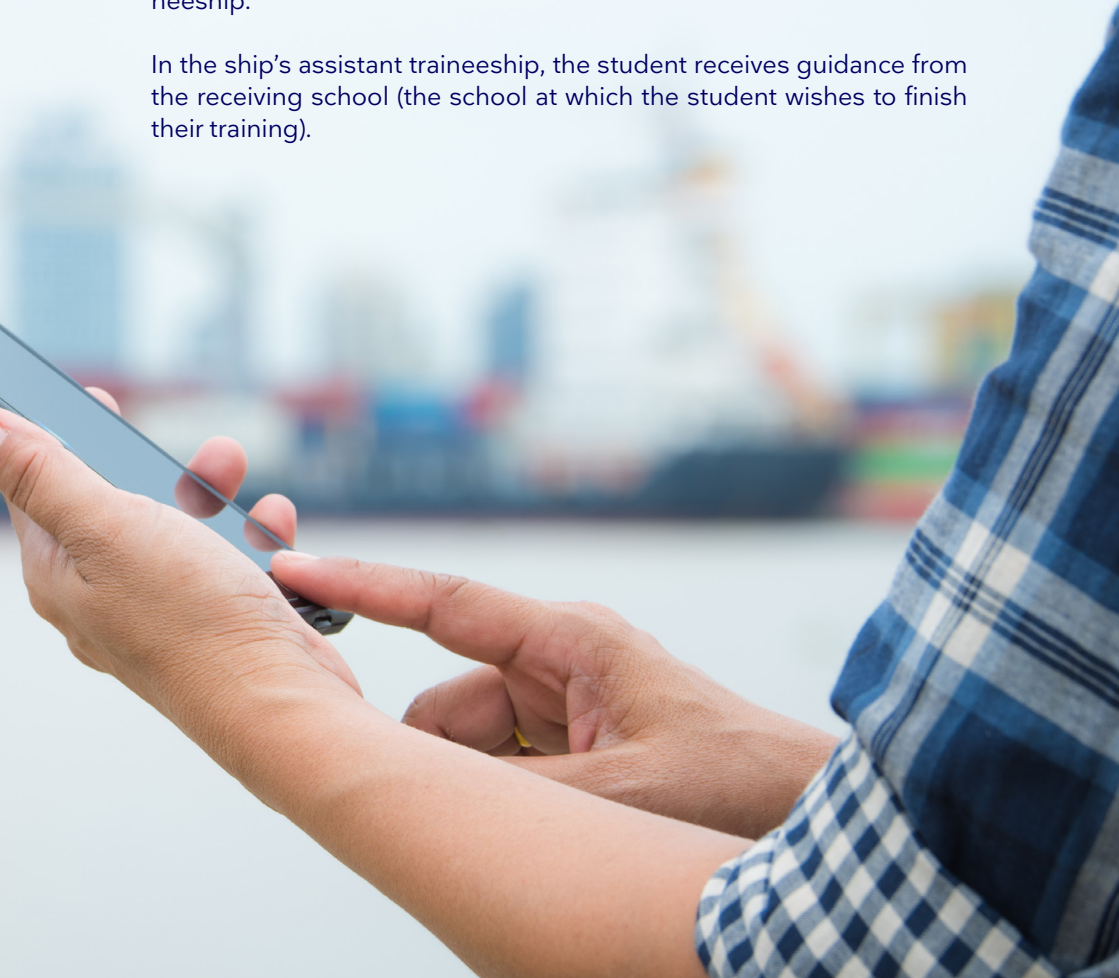
The Traineeship

Ship's Assistant Programme

The traineeship component consists of an introductory traineeship followed by a ship's assistant traineeship, which must include at least 6 months' effective service at sea.

In the introductory traineeship, the student receives supervision from the school where the student must take the initial 20 weeks of the traineeship.

In the ship's assistant traineeship, the student receives guidance from the receiving school (the school at which the student wishes to finish their training).



Objectives of the Ship's Assistant Traineeship

The purpose of the traineeship is for the students to develop the knowledge, skills and competences required for ship's assistants. The following learning objectives have therefore been set for the traineeship.

The learning objectives in terms of knowledge are for a ship's assistant to possess

01

knowledge about the work that generally takes place on a ship,

02

knowledge of bridge watchkeeping as well as deck and machinery work with commonly found tools and machinery,

03

knowledge of the ship's construction, design, machinery and other equipment,

KNOWLEDGE

04 knowledge of the ship's navigational and mechanical engineering working areas, understanding of the importance of good maintenance work on board,

05 knowledge of health and safety risks in carrying out the work on various types of ships so that accidents and occupational injuries can be avoided,

06 knowledge of transport processes and handling of loads and

07 knowledge of entrepreneurship in the form of basic terms and inspiration for the improvement of existing processes and working methods and the development of new ones.

The learning objectives in terms of skills are for a ship's assistant to be able to

01 actively participate in the development and maintenance of a safe and healthy working environment,

02 independently carry out specific repair and maintenance duties on board a ship,

03 use and maintain life-saving equipment,

04 carry out specific repair and maintenance duties on board a ship,

05 carry out work in accordance with specified norms for quality,

SKILLS

06 carry out practical work on board with cordage, wire and lashing gear,

07 carry out practical fire fighting operations,

08 contribute to improving the implementation and quality of the work and

09 employ and actively communicate in English within the areas that are relevant to the profession.



COMPETENCES

The learning objectives in terms of competences are for a ship's assistant to be able to

01

actively cooperate in the planning of assignments,

02

independently carry out practical tasks in connection with the work on board the vessel in general (including maintenance work),

03

manage and carry out minor transport processes for the operation of cranes, etc.,

04

be aware of the importance of a safe and healthy working environment, and

05

actively participate in fostering a good psychological working environment and good working relationships.



Contents of the Traineeship

For the duration of the traineeship, the student must focus on achieving the competence objectives for the programme. The traineeship should be organised so that the student has the opportunity to meet the requirements that exist for assignments and training progression. The seafarer also shares part of the responsibility to ensure that their time at sea is utilised in the best possible manner.

Bridge Watchkeeping during the Traineeship Period

Over the course of the introductory traineeship, students must be involved in bridge watchkeeping under the supervision of a qualified officer in order to attain the navigational watchkeeping certification in accordance with Regulation II/4 of the STCW Convention.

Over the course of the entire traineeship, students must undergo a minimum of 2 months of bridge watchkeeping under the supervision of the shipmaster or a qualified officer in accordance with Regulation II/4 of the STCW Convention.

The bridge watchkeeping service should be organised in such a way that the student has the opportunity to keep watch during the ship's operation through trafficked waters and during manoeuvres. Considerable importance should be attached to the student's understanding of the necessity of maintaining good discipline on the bridge, in compliance with Chapter VIII of the STCW Convention.

Engine Room Service

The traineeship must include engine room service to ensure familiarisation with the engine room and practical skills for ensuring the operation of minor parts of the machinery in vessels where there is no requirement for a machinery crew.

The Ship Assistant's Qualifications

The last part of the traineeship should be implemented in a way that enables the student to acquire the knowledge, skills and competences for carrying out the duties of a ship's assistant, including experience in the practical application of the workmanship-related qualifications.

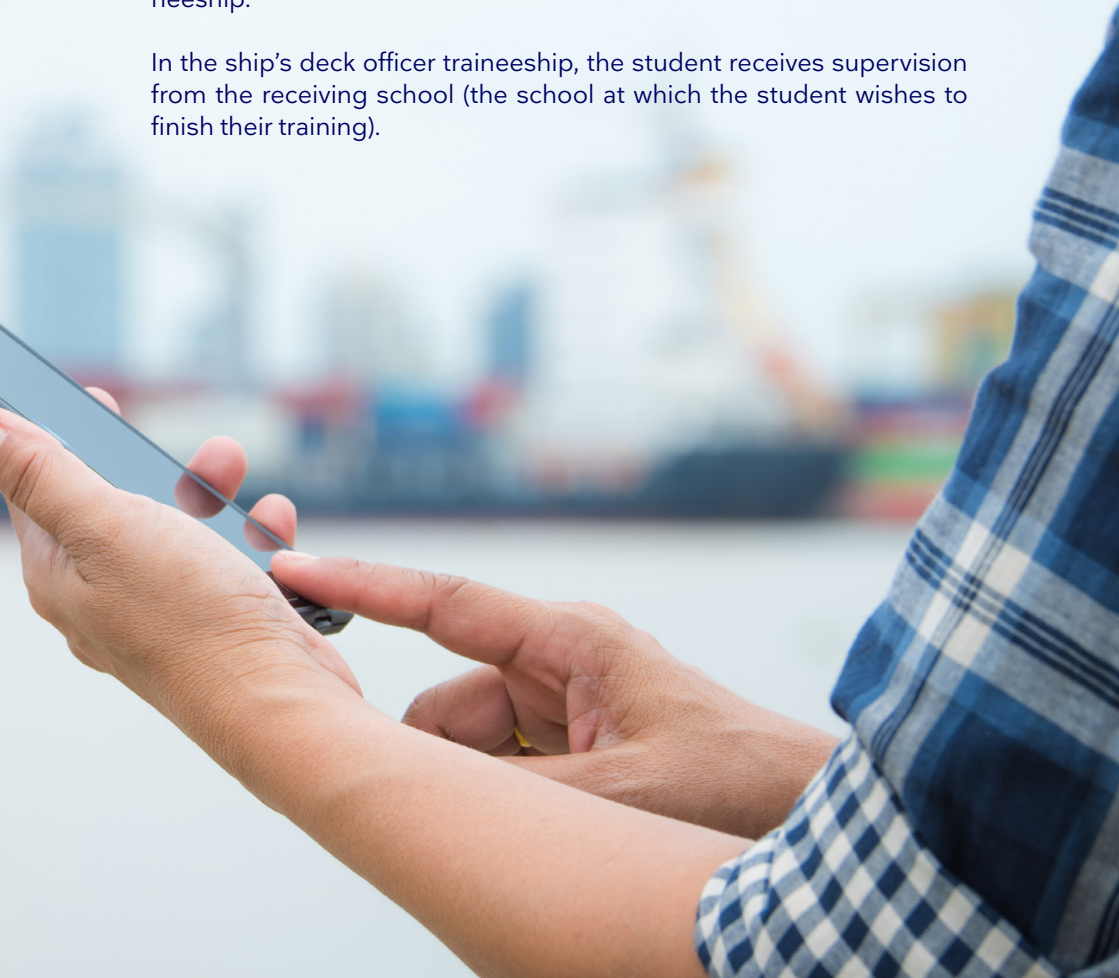


The Traineeship Master Programme

The traineeship element consists of an introductory traineeship followed by a ship's deck officer traineeship, which must include at least 6 months' effective service at sea.

In the introductory traineeship, the student receives supervision from the school where the student must take the initial 20 weeks of the traineeship.

In the ship's deck officer traineeship, the student receives supervision from the receiving school (the school at which the student wishes to finish their training).



Objectives of the Master Traineeship

The purpose of the traineeship is for the students to develop the knowledge, skills and competences required for masters. The following learning objectives have therefore been set for the traineeship.



KNOWLEDGE

The learning objectives in terms of knowledge are for a master to possess

01 knowledge of typical work on board a ship, both in terms of navigational and mechanical engineering working areas,

02 knowledge of the typical construction and fitting of seagoing vessels of 500 gross tonnage or less,

03 basic knowledge of mechanical engineering operation in ships with a propulsion power of 750 kW or less in short-sea shipping,

04 understanding of navigation, watchkeeping and meteorology in terms of operating ships in short-sea shipping,

05 understanding of the factors that affect a ship's stability and how to assess a ship's stability,



KNOWLEDGE

06 knowledge of the elementary principles of operating accounts, salary accounts and ship accounts,

07 knowledge of relevant international conventions and Danish legislation in the field,

08 knowledge of marine environmental protection,

09 knowledge of health and safety risks in carrying out the work on the ship so that accidents and occupational injuries can be avoided, and

10 knowledge of entrepreneurship in the form of basic concepts relating to the start-up and operation of self-employed activities and inspiration for developing new procedures.

The learning objectives in terms of skills are for a master to be able to

01 carry out practical tasks on ships in short-sea shipping in accordance with established quality norms,

02 organise cargo handling and stowage on vessels of 500 gross tonnage or less in short-sea shipping,

03 be responsible for the safe operation of a ship's machinery (up to 750 kW),

04 perform bridge and watchkeeping duties on seagoing vessels of 500 gross tonnage or less in short-sea shipping,

05 master technical English terms in the context of verbal and written communication in relation to serving on seagoing vessels/watchkeeping and other maritime disciplines,

SKILLS

06 search for and assess information in connection with a practical assignment on a seagoing vessel in short-sea shipping,

07 prepare and implement procedures that are conducive to personal safety as well as the ship's general safety,

08 make use of the ship's safety-related muster lists in Danish and English and

09 function as the ship's fire safety officer.



The learning objectives in terms of competences are for a master to be able to

01 independently perform the role as officer on watch and master of seagoing vessels of 500 gross tonnage or less in short-sea shipping,

02 independently carry out practical tasks in connection with the work on board the vessel in general (including maintenance work),

COMPETENCES

03 handle the management-related duties associated with the role of watchkeeping officer and shipmaster of seagoing vessels of 500 gross tonnage or less in short-sea shipping,

04 be responsible for the vessel's fire safety,

05 function as the health and safety officer on seagoing vessels of 500 gross tonnage or less in short-sea shipping and

06 take responsibility for environmentally friendly ship operations, including energy-efficient operations and reduction of emissions.



Contents of the Traineeship

For the duration of the traineeship, the student must focus on achieving the competence objectives for the programme. The traineeship should be organised so that the student has the opportunity to meet the requirements that exist for assignments and training progression. The seafarer also shares part of the responsibility to ensure that their time at sea is utilised in the best possible manner.

Bridge Watchkeeping during the Traineeship Period

Over the course of the introductory traineeship, students must be involved in bridge watchkeeping under the supervision of a qualified officer in order to attain the navigational watchkeeping certification in accordance with Regulation II/4 of the STCW Convention.

Over the course of the entire traineeship, students must undergo a minimum of 6 months' bridge watchkeeping under the supervision of the shipmaster or a qualified officer in accordance with Regulation II/1 of the STCW Convention.

The bridge watchkeeping service should be organised in such a way that the student has the opportunity to keep watch during the ship's operation through trafficked waters and during manoeuvres. Considerable importance should be attached to the student's understanding of the necessity of maintaining good discipline on the bridge, in compliance with Chapter VIII of the STCW Convention.

Engine Room Service

The traineeship must include engine room service to ensure familiarisation with the engine room and practical skills for ensuring the operation of minor parts of the machinery in vessels where there is no requirement for a machinery crew.

The Master's Qualifications

The last portion of the traineeship should be organised so that the student in particular acquires the knowledge, skills and competences to carry out the duties of watchkeeping officers and shipmasters, including planning and organising work on board the vessel.



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Study Activities during the Traineeship

This section contains a brief description of the study activities the student must complete during the traineeship. In addition to the study activities, the student should not forget to do the following:

- to complete the Training Record Book's "particulars of the trainee" form,
- to complete the training forms regarding safety and shipboard familiarisation as soon as possible upon joining the ship once sufficient experience has been achieved,
- to complete the form "Particulars of the Ship" during the first period on board,
- that 2 months of bridge watchkeeping duties must be registered in order to obtain a Bridge Watchkeeping Certificate,
- to read the instructions from the shipping company,
- to have the training forms endorsed with date/signature as well as remarks once sufficient experience has been achieved,
- to present the Training Record Book to the senior officers at least once a month and to obtain endorsement,
- to complete the five written assignments that briefly describe the execution of a given task.

Logbook

During their traineeship, the student must work with the logbook. The logbook should be used by the student to demonstrate the progression that takes place during the traineeship. The educational institution that the student is transferring from or to will be in dialogue with the student about their progression through the training.





The Training Record Book

During the traineeship, the student must work with the Training Record Book as well as the activities described therein. The Training Record Book must be presented to the school the student is admitted to if the student wishes to pursue further education. The student can only work with the Training Record Book if the student also works with the mandatory assignments (the description of which can be found in the Training Record Book).

Many of the subjects covered in the Training Record Book as well as the written assignments require the seafarer to study in their free time on board the ship. However, general subjects can be covered as part of the seafarer's daily work on board the ship.

The training forms in the Training Record Book must be signed off on by the training officer once a training objective has been satisfactorily completed. Once an objective has been completed, the student must continue to learn about the subject. It is the training officer's responsibility to sign off on the achievement of an objective in the Training Record Book.

The Training Record Book as well as the assignments (below) must be presented for approval at the educational institution where the student subsequently seeks admission.



Assignments

During their time at sea, the seafarer must complete a minimum of 5 mandatory assignments (of the 6 assignments below)

- Assignment 1: Safety
- Assignment 2: Maintenance
- Assignment 3: Navigation
- Assignment 4: Mooring/anchoring
- Assignment 5: Ship-specific assignment
- Assignment 6: Working environment

The student is only required to choose to describe one subject within the five selected assignments. The assignments consist of a theoretical and practical component. The theoretical component consists of planning and subsequently describing the work or safety routine completed by the student. The seafarer is not meant to provide extensive technical observations. A maximum of three pages (not including any annexes) is recommended for each assignment. The practical component consists of the execution of the planned assignments.

The assignments are described in detail in the Training Record Book.



What are the Training Officer's Responsibilities?

The training officer is the seafarer's contact person on board the ship. Among other things, this means that the training officer organises the training on board the ship together with the senior officers so that particular consideration is given to the seafarer's background, time at sea, age, experience, etc.

The training officer must ensure that the guidelines of the Training Record Book are adhered to by all parties (see also the Training Record Book).

The training officer must supervise the student in completing at least five out of the six described assignments. It is recommended that the training officer evaluates and comments on the seafarer's written work.

It is recommended that on each ship, the officers put together a special checklist with items specific to that ship. Such a list will be of great use when officers are replaced, as it makes it easier for the replacement to determine each seafarer's training status and what to focus on next.

Further Reading

If you want to read the excerpts in context, you can read the following:

The Danish Ministry of Higher Education and Science (2017)
Executive order on the basic maritime programme

The Danish Ministry of Higher Education and Science (2014)
Training Record Book for Seagoing Service: Ship's Assistant, Watch-keeping Officer's Examination, Ship's Officer's Examination, Master's Examination Limited and Master's Examination Unlimited.

Questions?

Contact Danish Shipping's Shipboard Training Office if you are looking for training material or if you have any questions about the role of training officer.

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