



## Purpose:

The simulator is intended for training ratings forming part of a navigational watch in accordance with Section A-II/4 of STCW Code.

## List of basic knowledge and skills, worked out with the use of Steering Simulator for Helmsman:

➡ Steer the ship and also comply with helm orders in the English language.

- 1.1. Helm orders submitted in national language.
- 1.2. Helm orders submitted in the English language.
- 1.3. Transition to automatic steering.
- 1.4. Change-over to hand steering.
- 1.5. Hand steering in the "Tracking" mode.
- 1.6. Hand steering in the "Manual" mode.

➡ Keeping a proper look-out by sight and hearing.

- 2.1. Detecting the object at daylight.
- 2.2. Detecting the object at night.

➡ Contribute to monitoring and controlling a safe watch.

- 3.1. Training procedures to intercession on watch.
- 3.2. Training procedures to maintain a watch.
- 3.3. Training procedures to hand-over watch.
- 3.4. Training procedures to relief of watch.

## Simulated models:

- active models of merchant vessels more 4100 grt and
- target models of merchant vessels more 4100 grt, cutter, motor boat, sailing yacht, waverunner, marine patrol vessel, FRB, liferaft.

## Exercise areas:

- Marine area passage of the narrows
- District approach from the sea port
- Open sea area
- The areas of inland waterways with one-way traffic of ships
- The area of inland waterways with the oncoming traffic
- The area of inland waterways with access to the sea.

## Target groups

Ratings forming part of a navigational watch

## Ship types

Generic

## Regulations

Table A-II/4 STCW Code  
*Competence: Steer the ship and comply with helm orders in the English language*  
*Competence: Keep a proper look-out by sight and hearing*  
*Competence: Contribute to monitoring and controlling a safe watch*





## Configuration

The simulator consists of the Instructor WorkPlace (IWP) software and one or several Student WorkPlaces (WPS).

Functional features of software Instructor WorkPlace (IWP) manages the process of training the student.

### The instructor provides:

- choice of exercises and adjusting the initial parameters (area of navigation, hydrometeorological conditions, time of the day, placement and trajectory of the target vessels, emergency situations, installation of navigation signs);
- entry of new targets;
- visual control of the students exercising with the help of virtual cameras;
- active management of the student's vessel; recording of the exercise for the debriefing;
- activation of distress signals to the liferaft.

Student's workplace (WPS) provides the student with the opportunity of multiple fulfillment of the exercises set by IWP and improving practical skills.

WPS can be presented in base or compact configuration.

Base configuration includes steering stand with built-in steering wheel, sensor control panel(s) and visualization system on LCD panels.

Compact configuration includes steering stand and visualization system of the surfaced plant which come out on the display of the monitor. Steering is carried out with the help of joystick and mouse. Student's workplace (WPS) imitates steering stand including steering stand with built-in steering wheel engine control (throttle/gears), sensor control panel including magnetic compass, navigation lights control buttons, search light control buttons, speed counter, panel for activation of distress signals; and visualization of the surrounding surface situation.

## Documentation

The simulator is supplied with a set of technical and operational documentation, including training and guidance on practical training.

## Conformity with US Coast Guard recommendations

In order to provide conformity with US Coast Guard recommendations (MERPAK RECOMMENDATIONS ON THE SPECIFICATIONS FOR SIMULATORS TO BE USED TO TRAIN AND/OR ASSESS APPLICANTS FOR CERTIFICATION AS AN RFPNW) simulator include the following features:



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- implementation of gyro-compass, steering pump and steering motor failure function to Student WorkPlace on the order from Instructor WorkPlace;
- implementation of the following steering alarms functions (to Student WorkPlace on the order from Instructor WorkPlace): the ARPA guard ring intrusion, gyro-compass failure, smoke and/or heat detectors, running light panel alarms, steering pump and motor failures alarms.

Exercises and manuals on SSH Simulator were developed in accordance with US Coast Guard requirements indicated in USCG 16721 NMC Policy Letter No. 14-02 24 July 2002, subj: "Qualifications for deck and engineering ratings".

For assessment of competence of RFPNW in accordance with "ASSESSMENT OF COMPETENCE RATING FORMING PART OF A NAVIGATIONAL WATCH. (USCG 16721 NMC Policy Letter No. 14-02 24 July 2002)" STORM has developed SSH Simulator contents exercises for demonstrating of competence.



Simulator

# SSH STEERING SIMULATOR FOR HELMSMAN

