Vector Marine Electronics, Ltd

Simulator FSWFG-3D

Training program to study the fishing schedule for operations with pelagic and bottom trawls with 3D animation of the deck crew's actions in the course of fishing operations

PURPOSE AND OPERATING MODES

FSWFG-3D - the training program is intended for cadets (students) of higher and secondary educational institutions of Rosrybolovstvo, as well as for the ordinary crew who wants to improve their qualification.

The program operates in three modes: "**study**", "**knowledge check**" and "**examination**". The training is aimed at studying the fishing schedules of the deck crew members with pelagic and bottom trawls for various types of fishing vessels.

Simulator FSWFG-3D

The simulator FSWFG-3D has the following functionalities:

- visualization in the form of 2D schemes locations and movements are members of the fishing watch, the state of fishing gear and fishing equipment on the deck of the fishing vessel;
- viewing and studying information about the actions performed by the members of the watch (in the form of a textual description of the work);
- monitoring the work of fishing watch members on the deck of a fishing vessel and the state of fishing gear and tools in the form of 3D animations;
- review and study of additional information on the safety of work on the deck in the form of 2D illustrations and text descriptions;
- interaction between the instructor and the trainee through an interactive graphical interface;
- keeping a record of students' progress for their finished tasks on studying, controlling knowledge and exams.

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Structure of FSWFG-3D

Simulator FSWFG-3D may be used by students independently on a single PC or in a computer lab under the supervision of an instructor. The instructor can assign exercises to each trainee individually. The account of results of the executed exercises by each trainee is kept in the journal of the instructor.

When using the program in the network version, a specialized WPI management program is installed at the instructor's workplace. On the workplaces of trainees, is installing the WPT program. All computers are connected to the local Ethernet network. In self-learning, both parts of the software (WPI and WPS) are installed on the PC.

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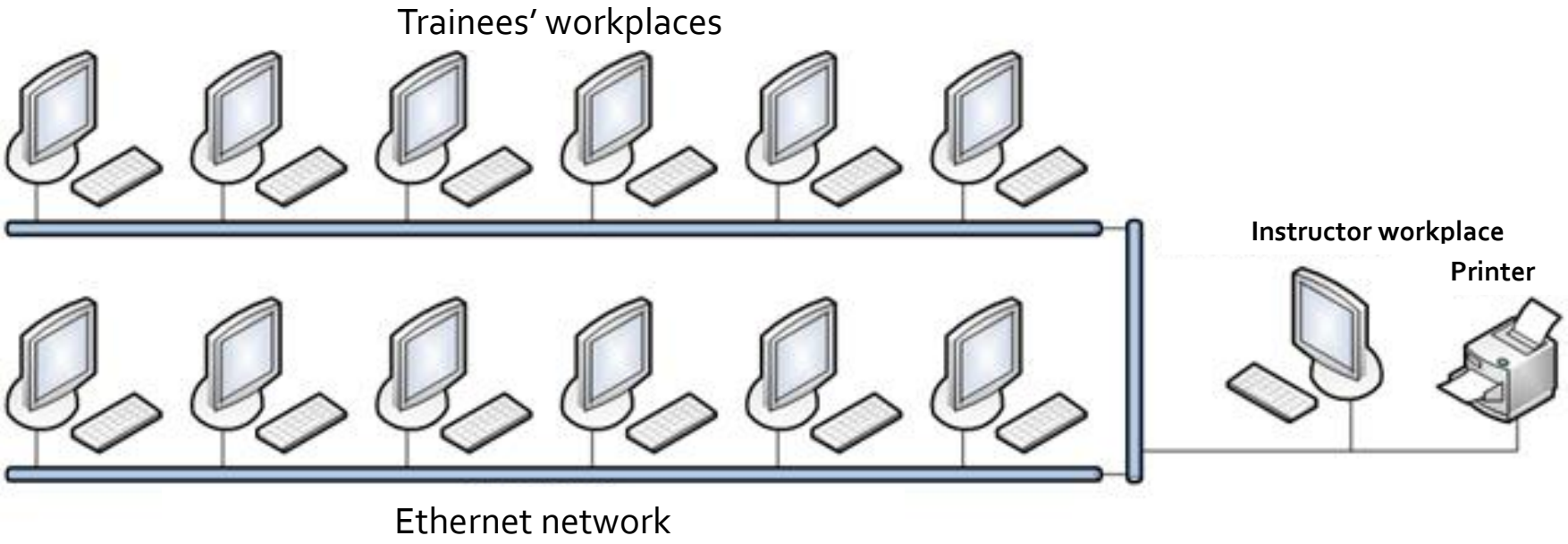
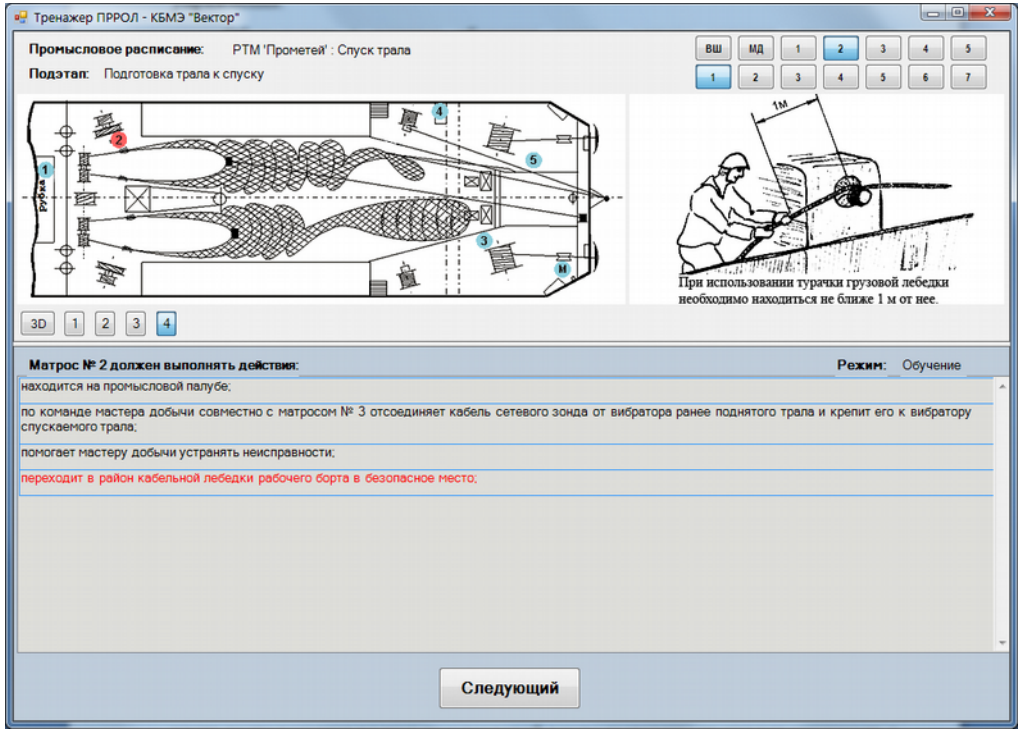
Structure of FSWFG-3D

The structure of the PROROL-3D is shown in the figure



Performance of tasks

In the "study" mode, the trainee must select the necessary proposals characterizing the actions of the examined member of the fishing watch from the set of proposed ones that were randomly generated from the actions of the operation being studied and operations from other stages and other members of the watch.



The trainee can carry out the study in an arbitrary order (stages, sub-stages and operations).

The time of the exercise is not regulated by the instructor

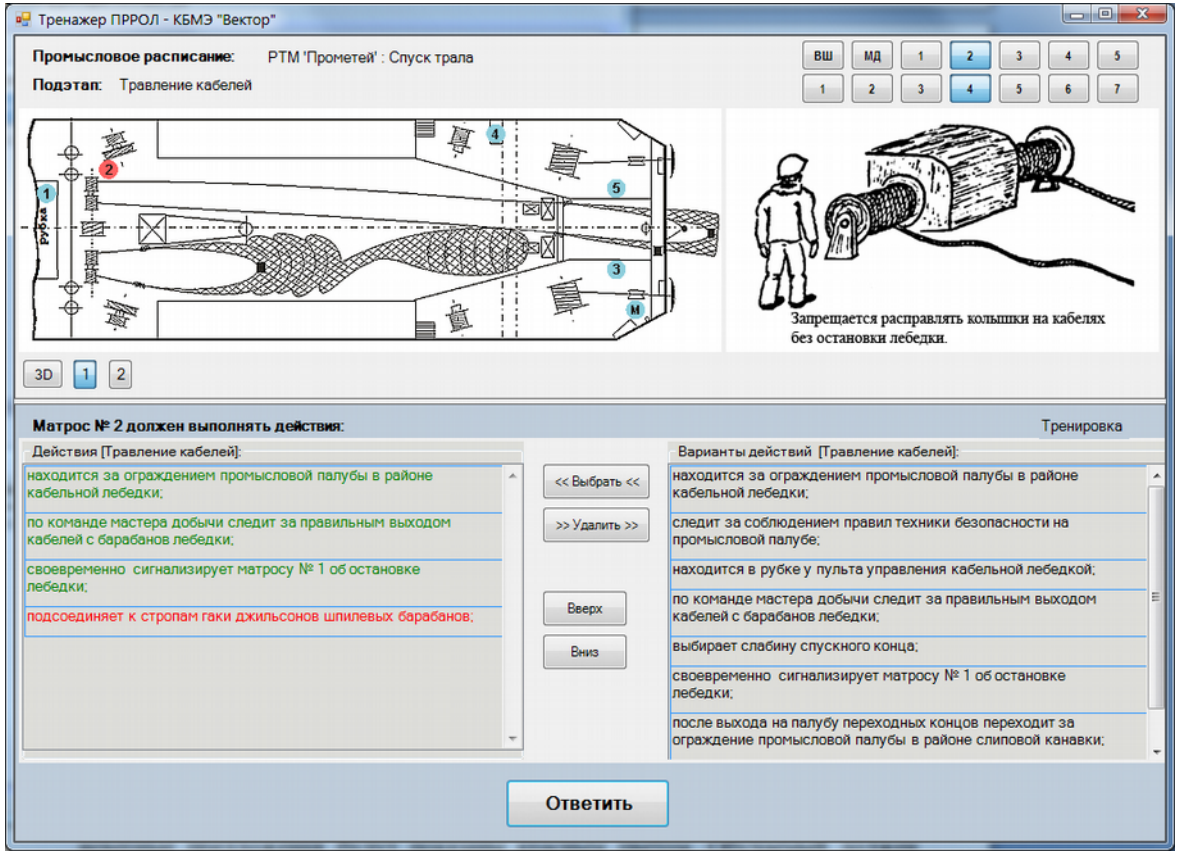
The text describing the actions of the members of the fishing watch for each operation is presented in the form of proposals that are complete in accordance with the approved standard fishing schedule.

Performance of tasks

At any time, the learner, by clicking on the "3D" button, can look in a separate window the 3D animation of the actions of all members of the fishing watch on the operation being studied.

Performance of tasks

In the "knowledge check" mode, the trainee can check his knowledge of the actions of the examined member of the fishing watch while performing the fishing operation. Just like in the "learning" mode, the learner can choose his own task. In this mode, the data of one task is displayed, as shown below.



As in the "learning" mode, the trainee is provided with buttons for selecting the 2D scheme of the state of fishing gear and the button for playing 3D animation of the activities of fishing watch members on the deck of a fishing vessel. The result of the work is evaluated without saving the mark in the journal.

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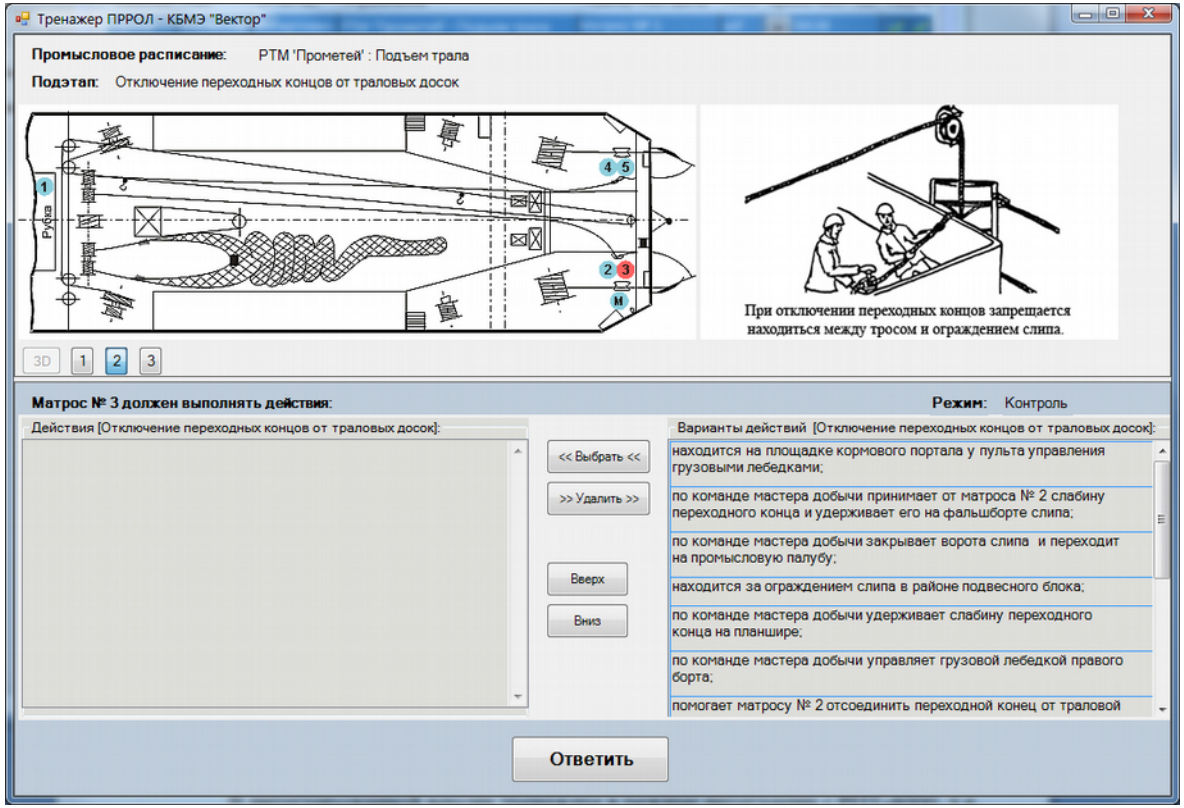
Performance of tasks

In the "exam" mode, the trainee consistently performs tasks for the actions of only one member of the fishing watch appointed by the instructor. The exercise finish as soon as the student answers the last task in the exercise.



After the completion of the exercise, the program shows the trainee a message with the number of incorrect answers. Detailed information about results of the exercise is stored in the journal and available only for instructor.

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