ANCHOR EQUIPMENT

Purpose:

The e-learning module is designed for theoretical training of ratings as able seafarer deck in accordance with Chapter II of the STCW Convention in the part concerning of anchoring operations.

The ELM is included in the *"Able seaman"* library.

What is an e-learning module?

E-learning module is the electronic textbook on one or more sections. Theoretical materials can be accompanied by drawings, diagrams, photos, animations and videos. There is a test for assessment of knowledge gained at the end of each section.

Contents:

- Anchor gear components
- Anchor handling operations
- Safe anchoring operational guidance

Target groups

Deck - Support

Ship types

Generic

Regulations

Table A-II/5 STCW Code

Competence:	Contribute to berthing, anchoring and other mooring operations
Knowledge, understanding and proficiency:	Working knowledge of the mooring system and related procedures6 including: .4 the procedures and order of events for the use of anchors in various operations

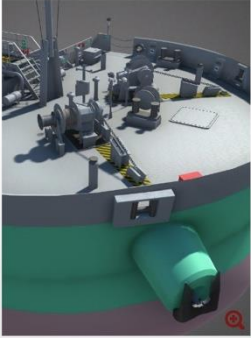|	
Competence:	Contribute to the safe operation of deck equipment and machinery
Knowledge, understanding and proficiency:	Knowledge of deck equipment including: .6 ability to operate anchoring equipment under various conditions such as anchoring, weighing anchor, securing for sea, and in emergencies

ANCHOR EQUIPMENT

Storm Sim

Section 1. Anchor gear components

Anchor gear

An anchor gear must:

- ensure reliable anchorage of the vessel on the roads and on the open sea;
- hold a vessel that is both at anchor(s) and at mooring lines;
- serve as one of the means of getting the ship off the ground;
- facilitate vessel's handling in confined waters.

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Section 1. Anchor gear components

Anchors used on ships are divided into three large grades by design:

✓ I – anchors having a stock and going into the ground with one fluke. Admiralty pattern anchor.

✓ II – housing anchors, stockless, going into the ground with two flukes. Hall, Gruzon, Boldt anchors are the most used types of anchors on ships.

✓ III – anchors of high holding power with swivel flukes and a stock. They have long flukes extended along the shank. These include the Matrosov's anchors (the functions of the stock are performed by protrusions on the flukes) and Danforth anchor (the stock is located on the box).

Anchors:
a) Admiralty pattern anchor;
b) Hall's anchor;
c) Matrosov's anchor;
d) Gruzon's anchor.

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Section 1. Anchor gear components

Spare anchors

Spare anchors are identical in design and weight to bow anchors and are stored in specially designated places on deck or in the hold.

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Section 2. Anchor handling operations

Inspection

Once every two years, anchor chains must be submitted to the classification society for inspection.

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Section 1. Anchor gear components

Windlass

A windlass (capstan) is an electric or hydraulic machine used to drop and heave up the anchor. Capstans on the forecastle are mainly installed on ships of large displacement, passenger and specialized vessels.

1 – gypsy head; 2 – band brake;
3 – pendular stopper; 4 – deck hawse hole;
5 – cable lifter with mooring line;
6 – windlass control panel; 7 – bed plate.

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Test tasks

Test of question

What is the name of the device designed to manually lay the chain in the chain locker?

Choose the correct answer

○ Boat hook.
○ Gooseneck.
○ Mast coat.
○ Upholder.

Attempts: 1.   Miss

COMMENT

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