



TEACHER'S MANUAL

Course:
Fast Rescue Boat Operations

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The purpose of the teacher's manual is to assist teachers in organizing and introducing training courses. It is not the intention of teacher's manual to provide teachers with a rigid teaching package which they are expected to "follow blindly", because national educational systems, groups size and the cultural backgrounds of trainees in maritime subjects vary considerably from country to country. The teacher can choose suitable parts for target group and can even make changes that are needed to achieve the learning outcomes.

The teacher's manual has been designed to give ideas how to you use material developed in the OnBoard Med –project. Teacher's manuals content is: objectives, content, target group and student's amount, implementation and learning methods, assessment, learning process (summary) and tips for the teacher.

Fast Rescue Boat Operations 2 ECTS = 54 hours

OBJECTIVES

In Fast Rescue Boat Operations, the target is to provide specific knowledge and practical experience in operation with Fast Rescue Boat (FRB) in extreme situations.

Learning objectives are: Skills needed for launching and operating of a Fast Rescue Boat in an emergencies, knowledge on technology of FRB's, safety issues, search tactics, environmental limitations, as well as engine repair and operation. The content is compliant with the IMO regulations. A procedure is designed that tests skills according to STCW A-VI/2 and 2-2 for certification of the participants.

STCW Table A-VI/2-2

Specification of the minimum standard of competence in fast rescue boats

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Understand the construction, maintenance, repair and outfitting of fast rescue boats	<p>Construction and outfitting of fast rescue boats and individual items of their equipment</p> <p>Knowledge of the maintenance and emergency repairs of fast rescue boats and the normal inflation and deflation of buoyancy compartments of inflated fast rescue boats</p>	Assessment of evidence obtained from practical instruction	The method of carrying out routine maintenance and emergency repairs

<p>Identify components and required equipment for fast rescue boats</p>	<p>Take charge of the launching equipment and appliance as commonly fitted, during launching and recovery</p> <p>Assessment of the readiness of launching equipment and launching appliance of fast rescue boats for immediate launching and operation</p> <p>Understand the operation and limitations of the winch, brakes, falls, painters, motion-compensation and other equipment as commonly fitted</p> <p>Safety precautions during launching and recovery of a fast rescue boat</p> <p>Launching and recovery of a fast rescue boat in prevailing and adverse weather and sea conditions</p>	<p>Assessment of evidence obtained from practical demonstration of ability to control safe launching and recovery of a fast rescue boat, with equipment as fitted</p>	<p>Ability to prepare and take charge of the launching equipment and appliance during launching and recovery of a fast rescue boat</p>
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<p>Take charge of a fast rescue boat as commonly fitted, during launching and recovery</p>	<p>Assessment of the readiness of fast rescue boats and related equipment for immediate launching and operation</p> <p>Safety precautions during launching and recovery of a fast rescue boat</p> <p>Launching and recovery of a fast rescue boat in prevailing and adverse weather and sea conditions</p>	<p>Assessment of evidence obtained from practical demonstration of ability to conduct safe launching and recovery of a fast rescue boat, with equipment as fitted</p>	<p>Ability to take charge of a fast rescue boat during launching and recovery</p>
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<p>Take charge of a fast rescue boat after launching</p>	<p>Particular characteristics, facilities and limitations of fast rescue boats</p> <p>Procedures for the righting of a capsized fast rescue boat</p> <p>How to handle a fast rescue boat in prevailing and adverse weather and sea conditions</p> <p>Navigational and safety equipment available in a fast rescue boat</p> <p>Search patterns and environmental factors affecting their execution</p>	<p>Assessment of evidence obtained from practical demonstration of ability to:</p> <p>.1 right a capsized fast rescue boat</p> <p>.2 handle a fast rescue boat in prevailing weather and sea conditions</p> <p>.3 swim in special equipment</p> <p>.4 use communications and signalling equipment between the fast rescue boat and a helicopter and a ship</p> <p>.5 use the emergency equipment carried</p> <p>.6 recover a casualty from the water and transfer a casualty to a rescue helicopter or to a ship or to a place of safety</p> <p>.7 carry out search patterns, taking account of environmental factors</p>	<p>Demonstration of operation of fast rescue boats within equipment limitations in prevailing weather conditions</p>
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Operate a fast rescue boat engine	Methods of starting and operating a fast rescue boat engine and its accessories	Assessment of evidence obtained from practical demonstration of ability to start and operate a fast rescue boat engine	Engine is started and operated as required for manoeuvring
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CONTENT

The content is compliant with the IMO regulations. A procedure is designed that tests skills according to STCW A-VI/2 and 2-2 for certification of the participants. Course content in accordance to the Imo Model Course 1.24. This course covers training in the mandatory minimum requirements for the issue of certificates of proficiency in fast rescue boat.

TARGET GROUP AND STUDENT AMOUNT:

Mariners, maximum 8 persons (practical part) or (Online) 20 persons

IMPLEMENTATION

Online reading - active lessons - test, pre- and final test (and practical training)

ASSESSMENT

- | | |
|---------------------------|---|
| - Pre-work/Lessons Online | Has done all parts in the online platform |
| - Practical training | Pass/Fail |
| - Final test | Pass/Fail |
| 70 % minimum | |

LEARNING METHODS

eLearning is learning utilizing electronic technologies to access educational material outside a traditional classroom. eLearning can be f. ex. online videos, lectures, discussions, teacher consultation, e-testing.

Exercise is an activity carried out for a specific purpose in online or face to face and can be individual or group exercise. F. ex. pre tasks, classroom exercise, model answer questions.

Lecture: an educational and theoretical talk to the students which should be interactive. When the instructor incorporates engagement triggers and breaks the lecture at least once per class to have students participate in an activity that lets them work. The engagement triggers capture and maintain student attention and allow students to apply what they have learned or give them a context for upcoming lecture material. Lecture can be online, video lecture or face to face.

Skill lab provide students with an opportunity to learn and develop the skills essential to nursing / maritime practice within a supportive and safe environment.

Simulation is a form of experiential learning. Where teacher sets problems, events or scenario that can be used for training students, how to behave in authentic situation within a supportive and safe environment. It includes introduction, simulation and debriefing.

Workshop is a period of practical work on a particular subject in which a small group of people share their [knowledge](#) or experience. Workshop can also be like learning café where you develop new ideas or approaches to specific subject.

SUMMARY

From this summary you as a teacher can easily choose by the learning subjects and material you want to use with you students (depends on the target group and the group size). E.g. if you have nursing students they have already knowledge for first aid, however you will need that material with mariners and other way around with e.g. the safety transfer onboard. And also depending on the time that you can use in the subject, there is lectures, exercises to do in the classroom with bigger group.

CONTENT	TIME	LEARNING METHODS and MATERIAL	ASSESSMENT
Briefing, Defusing, Debriefing	2 h	Face to Face (practical part of the course)	
International Organizations and Conventions <ul style="list-style-type: none"> - IMO - STCW - EMSA 	0,5h	Lecture	

<ul style="list-style-type: none"> - SOLAS - LSA - ISM - IAMSAR 			
General Requirements of Fast Rescue Boat	1-2 h	Lecture	
Use of the Fast Rescue Boat <ul style="list-style-type: none"> - MOB situations - General evacuation - Towing life rafts - Transport of injured person - Assistance in searches 	1-3 h	Lecture Film Practical	
Different types of Fast Rescue Boats <ul style="list-style-type: none"> - Inflatable FRB - Rigid FRB - Rigid inflatable FRB 	1-2 h	Pictures Pre-work	
Engines and systems <ul style="list-style-type: none"> - Engines and Requirements. - Outboard or Diesel engine. Propeller or water jet. - Propulsion systems - Controls - Batteries (accumulators) - Means of bailing - Engine trouble and trouble shooting 	2-3 h	Lecture Practical	
Inspection and maintenance of the FRB <ul style="list-style-type: none"> - The air chambers - The hull 	1-2 h	Lecture Pictures Practical	

<ul style="list-style-type: none"> - The launch and retrieval system - The self-righting system - Electrical equipment - Appliances - Steering - Fuel system - The motor 			
Equipment of an FRB	1-2 h	Pictures Pre-work	
Man over board situation	2-4 h	Lecture Film Practical	
Capsize and re-righting the FRB <ul style="list-style-type: none"> - How to avoid capsizing - How to prepare for capsizing - How to re-right the FRB - Capsizing step by step 	2-3 h	Film Practical	
Launching and Recovery Arrangements <ul style="list-style-type: none"> - Preparations - The crew - Crane - Davit - Painter line - Hook - Boarding a moving ship 	2-3 h	Lecture Film Practical	
Weather conditions	1 h	Film Practical	
Operating Fast Rescue Boat	2-3 h	Lecture Practical	

<ul style="list-style-type: none"> - Starting FRB - Maneuvering - Towing with a FRB 			
Search and Rescue <ul style="list-style-type: none"> - Planning and conducting the search - Search patterns - Search near shore 	2-3 h	Lecture Practical	
Transfer and evacuation <ul style="list-style-type: none"> - Helicopter rescue - Get the person in to the boat from the water 	1 h	Film Practical	
Navigation equipment <ul style="list-style-type: none"> - Compass - GPS - VHF and Communication 	1 h	Lecture Practical	
First aid <ul style="list-style-type: none"> - Hypothermia - Drowning 	1 h	Lecture Film	
Practical Exercises	18-28 h		Pass/Fail
Final test	1 h		Pass/Fail

TIPS FOR TEACHERS

Material

Lectures (presentations)

- MOB_checklist
- FRB_International_Organizations_and_conventions
- FRB_General_Requirements
- First_Aid
- FRB_Inspection_and_maintenance_of_the_FRB
- FRB_Use_of_the_Fast_Rescue_Boat

- FRB_Engines_and_Systems
- FRB_Launching_and_Recovery_Arrangements
- FRB_Navigation_Equipment
- FRB_Man_over_board
- FRB_Search_and_Rescue

Videos

- Recovery_of_Fast_Rescue_Boat
- Launch_of_Fast_Rescue_Boat
- Capsize
- MOB
- Hypothermia
- Helicopter
- Painter
- Weather


Picture Bank

Practical

- Maneuvering FRB
- Operating FRB

Pre-Task

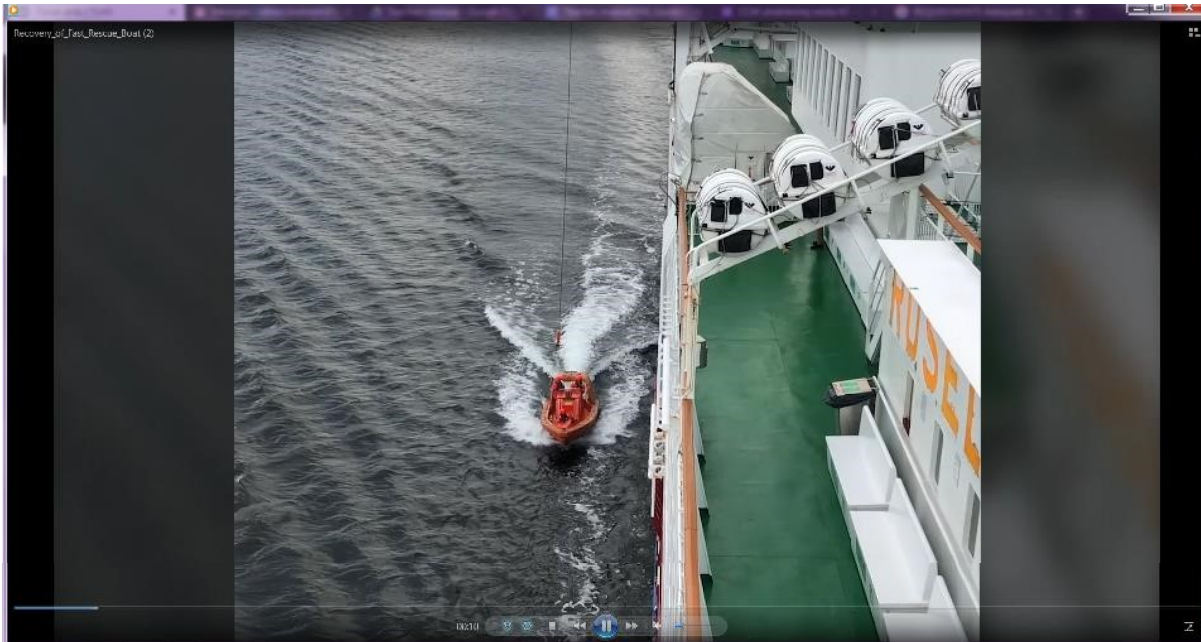
1. List the equipment of an FRB. Add the document to the "return-box".
2. Describe different types of Fast Rescue Boats (3) and add the document to the "return-box".

 Return-box

Status: Status öppen

[Visa mera »](#)

Pre-work



Video

<https://www.youtube.com/watch?v=osfJ4nHjRxM>

https://www.youtube.com/watch?v=x3SsozJ_mEA

<https://www.maritimetrainer.com/product-details/rescue-boat-accident-a-case-study/>

https://www.youtube.com/watch?v=yTld_p0blnE

- Start course with reading the introduction and the presentations and watch the films online.
- The student can choose the order in which he/she read/watch/do the material.
- The student has to read and watch all material in the online educational platform. The teacher can check that everything is done.
- The tasks have to be done before the practical part starts.
- Presentation face to face before the practical part starts: Briefing
- In the end of the course before final test: Debrief:
 - How did that go?
 - What did you learn?
- The course ends with the online final test.
- The material in the picture bank is free to use in the education.
- The practical part is the most important part in a fast rescue boat course. This learning material focuses on the theoretical parts of the course, as an introduction.

- This course is NOT approved and cannot be used in the present form. The course must be held at an approved training unit (STCW).
- REQUIREMENTS Adequate teachings qualifications according to national regulations.

Course leader:

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Course co-workers:

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(Briefing, Defusing, Debriefing)

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