
Norwegian Oil and Gas training curriculum

Basic MOB boat course

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FOREWORD

This training curriculum has been compiled for course providers approved by Norwegian Oil and Gas to provide the basic MOB boat course.

The training is intended to provide competence in operating an MOB boat.

In this context, competence means *the ability to perform tasks and master complex challenges*.

The contact for this training curriculum in Norwegian Oil and Gas is the manager, expertise development.

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See Norwegian Oil and Gas 002 Recommended guidelines for safety and emergency response training and requirements for emergency response training.

Contents

FOREWORD.....	2
1 INTRODUCTION.....	4
1.1 Purpose	4
1.2 Learning outcomes	4
1.3 Target group.....	4
2 CONTENT	5
2.1 Parameters for conducting the course.....	5
2.2 Teaching materials.....	5
2.3 Prior knowledge	5
2.4 Facilities and equipment	5
2.5 Training curriculum	5
3 ASSESSMENT AND DOCUMENTATION OF TRAINING.....	16
3.1 Assessment	16
3.2 Documentation.....	16
4 REVISIONS	17

1 INTRODUCTION

1.1 Purpose

This training curriculum describes requirements for the content and execution of the MOB boat course.

The training is designed to provide competence on

- organisation of emergency response
- regulatory and industry requirements
- technical aspects of an MOB boat
- manoeuvring
- hook arrangement – launching/hoisting
- navigation
- communication
- search and rescue
- practical first aid in boat
- night operation.

1.2 Learning outcomes

After completing the training, the participant must be able to

- launch, hook on, and operate boat and equipment in a satisfactory manner
- utilise the most commonly used search methods
- recover people from the sea and function as crew on an MOB boat.

1.3 Target group

The target group for the training is personnel who are to function as crew on an MOB boat.

2 CONTENT

2.1 Parameters for conducting the course

Teaching at the course centres must reflect a good safety culture.

Theory in the classroom: one instructor per 24 course participants.

Practical exercises: one instructor per three course participants in MOB boat.

For small MOB boat

Duration of the course is four days.

A minimum of 18 hours of practical exercises.

For large MOB boat

Duration of the course is five days.

A minimum of 24 hours of practical exercises.

- One course day is eight hours with a minimum of six hours of effective training.
- One hour is 60 minutes.

During practical exercises, the challenges and degree of difficulty must be increased in line with the rising level of mastery.

During practical exercises, the instructor will observe the participants and give immediate feedback, and time must be allotted for feedback and guidance after the exercise is over.

2.2 Teaching materials

Teaching materials used during the course must be tailored to the competence objectives specified in this training curriculum.

2.3 Prior knowledge

Basic safety and emergency preparedness course.

2.4 Facilities and equipment

The training can be conducted through classroom teaching, e-learning, simulator use and use of other appropriate facilities and equipment.

2.5 Training curriculum

Participants must be given an introduction before the course starts which reviews the purpose of the course, assessments, the timetable and safety measures.

See the training curriculum set out in table 1 below.

Table 1: Training curriculum

Topic		1.0 ORGANISATION OF EMERGENCY RESPONSE		
Competence objectives After completing the training, the participant will be able to:	Specification of competence objectives	Method	Learning environment	References
1.1 Outline a typical emergency response organisation	The participant must be able to outline <ul style="list-style-type: none"> the organisation of an emergency response organisation and explain the role and responsibility of the MOB boat's crew in it the purpose of the chain of command in an emergency response organisation other emergency response teams on the facility and their role and responsibility. 	Theory lesson(s)	Classroom E-learning	
1.2 Outline the behavioural patterns most commonly observed in emergencies, as well as the factors which influence them.	The participant must be able to outline <ul style="list-style-type: none"> the behavioural patterns most commonly observed in emergencies examples of stress factors which can affect one's own level of performance and that of others measures for mastering one's own stress. 			
1.3 Outline words and expressions related to emergency response	The participant must be able to outline <ul style="list-style-type: none"> defined situations of hazards and accidents (DSHA) performance requirements. 			
1.4 Describe the primary job of the MOB boat's crew	The participant must be able to describe <ul style="list-style-type: none"> search for and rescue of personnel the MOB boat's role in relevant DSHAs. 	Theory lesson(s)	Classroom E-learning	
1.5 Describe the crew's responsibilities and duties	The participant must be able to describe <ul style="list-style-type: none"> duties of the crew on board <ul style="list-style-type: none"> launch search rescue personnel hoisting. 	Theory lesson(s) Practical exercises	Classroom E-learning MOB boat	

Topic	2.0 REGULATORY AND INDUSTRY REQUIREMENTS			
Competence objectives After completing the training, the participant will be able to:	Specification of competence objectives	Method	Learning environment	References
2.1 Outline regulatory requirements for the MOB boat	The participant must be able to outline the most important regulatory requirements <ul style="list-style-type: none"> • small/large MOB boat types • technical specifications • approval pursuant to the Norwegian Maritime Authority's regulations • launch arrangement • outfitting of the boat • requirements for training on the facility. 	Theory lesson(s)	Classroom E-learning	

Topic	3.0 TECHNICAL ASPECTS OF AN MOB BOAT			
Competence objectives After completing the training, the participant will be able to:	Specification of competence objectives	Method	Learning environment	References
3.1 Describe the main system in an MOB boat	The participant must be able to describe <ul style="list-style-type: none"> • how the propulsion system works • hook system • self-righting system • emergency steering. For large MOB boat only The participant must be able to describe <ul style="list-style-type: none"> • diesel system • cooling system. 	Theory lesson(s) Practical exercises	Classroom E-learning MOB boat	
3.2 Prepare the MOB boat for use and check it out	In accordance with specific checklists, the participant must be able to carry out <ul style="list-style-type: none"> • pre-use checks • after-use checks. 	Practical exercises	MOB boat	Checklists
3.3 Outline behaviour should the MOB boat capsize, and how the self-righting equipment is released	The participant must be able to outline <ul style="list-style-type: none"> • behaviour in the event of a capsize • how the self-righting equipment is released. 	Theory lesson(s)	Classroom E-learning	Manufacturer's manual/video
3.4 Inspect and clean the water jet and impeller	The participant must be able to <ul style="list-style-type: none"> • clean the water jet/water inlet • describe the function of the impeller • describe access to the impeller • outline how to inspect and clear the water jet (water intake) and impeller. 	Practical exercises Demonstration	MOB boat	

Topic	4.0 MANOEUVRING			
Competence objectives After completing the training, the participant will be able to:	Specification of competence objectives	Method	Learning environment	References
4.1 Manoeuvre the MOB boat up to a vessel, facility or other hoisting point without exposing personnel or materials to danger	The participant must be able to <ul style="list-style-type: none"> • manoeuvre with fixed rpm • carry out hoisting • hold the boat in position for at least 20 seconds with the water jet connected • carry out emergency manoeuvring • use the bowline when hoisting to/lowering from vessel. For large MOB boat only The participant must be able to <ul style="list-style-type: none"> • manoeuvre with emergency steering and one engine. 	Practical exercises	MOB boat	
4.2 Operate the engine on the MOB boat	The participant must be able to <ul style="list-style-type: none"> • start and stop the engine. 	Practical exercises	MOB boat	Manufacturer's manual
4.3 Use the bow line when hoisting to/ lowering from vessel	The participant must be able to use the bowline when hoisting to/ lowering from vessel.	Practical exercises Demonstration	MOB boat	
4.4 Manoeuvre MOB boat up to person in the sea	The participant must be able to <ul style="list-style-type: none"> • carry out a safety stop • use correct rpm in relation to weather and conditions • position the boat in relation to person and weather • manoeuvre without threat to the MOB boat crew or the person in the sea • manoeuvre the boat so that the person can be taken on board carefully with the relevant aid. 	Practical exercises	MOB boat Exercise with manikin and person	
4.5 Be familiar with the dangers of travelling at high speed in heavy seas	The participant must be able to outline <ul style="list-style-type: none"> • issues with steering directly towards, across and with a following sea • how to secure and position personnel in the boat to avoid injuries. 	Theory lesson(s) Practical exercises	Classroom E-learning MOB boat	
4.6 Prepare to transfer personnel to a rescue helicopter	The participant must be able to outline <ul style="list-style-type: none"> • how personnel are transferred • organisation in the MOB boat • receiving a guide wire • collaboration with the rescue person. 	Theory lesson(s) Practical exercises	Classroom E-learning MOB boat	

Topic	5.0 HOOK ARRANGEMENT – LAUNCHING/HOISTING			
Competence objectives After completing the training, the participant will be able to:	Specification of competence objectives	Method	Learning environment	References
5.1 Describe the function and mode of operation of relevant hooks and be able to handle the hook system	The participant must be able to describe the way the relevant hook system works. The participant must be able to prepare the hook system for use as well as to secure, release and reset it.	Theory lesson(s) Practical exercises	Classroom E-learning MOB boat	Manufacturer's manual
5.2 Describe hazards when launching/ hoisting	The participant must be able to describe <ul style="list-style-type: none"> • the danger of capsizing when launching or taking up from the boat • motion compensation • weather conditions • crush injuries. 	Theory lesson(s) Practical exercises	Classroom E-learning MOB boat	
5.3 Outline launch methods for the MOB boat	The participant must be able to outline launch methods using <ul style="list-style-type: none"> • MOB boat davit • crane. 	Theory lesson(s) Practical exercises	Classroom E-learning MOB boat	Manufacturer's manual
5.4 Describe placing the crew in the MOB boat in various circumstances	The participant must be able to describe personnel placement during <ul style="list-style-type: none"> • launch • hoisting • with and without patient(s)/passengers. 	Theory lesson(s) Practical exercises	Classroom E-learning MOB boat	
5.5 Outline the interaction between the MOB boat crew, crane driver and banksman	The participant must be able to outline interaction during <ul style="list-style-type: none"> • launching • hoisting. 			

Topic	6.0 NAVIGATION			
Competence objectives After completing the training, the participant will be able to:	Specification of competence objectives	Method	Learning environment	References
6.1 Navigate and steer the MOB boat	The participant must be able to <ul style="list-style-type: none"> • change course using a magnetic compass • describe the effects of magnetism and other sources of disturbance • correct for the effect of wind and currents when calculating a course <ul style="list-style-type: none"> ○ drift as a result of wind and current acting on the MOB boat • calculate distance and time at a known speed. 	Practical exercises	MOB boat	
6.2 Recognise elementary maritime terms	The participant must be able to use maritime terminology.	Verbal use of maritime terms during the course		
6.3 Describe how a search and rescue radar transponder (Sart) is used	The participant must be able to describe how the Sart works and how it is activated/deactivated.	Theory lesson(s) Practical exercises	Classroom E-learning MOB boat	
6.4 For large MOB boats only Use GPS	The participant must be able to <ul style="list-style-type: none"> • set up the GPS with the most commonly used menus for search and rescue • enter waypoints with the aid of coordinates or distance/direction • plot and sail a course. 	Practical exercises	In MOB boat on the sea Use of crane/davit	
6.5 For large MOB boats only Use radar	The participant must be able to <ul style="list-style-type: none"> • outline the radar image • distinguish false echoes • outline the opportunities provided by and limitations of the instrument • set up a radar • recognise a Sart signal on the radar <ul style="list-style-type: none"> ○ set up the radar, identify Sart and steer to the target. 	Practical exercises	MOB boat	

Topic	7.0 COMMUNICATION			
Competence objectives After completing the training, the participant will be able to:	Specification of competence objectives	Method	Learning environment	References
7.0 Use communication methods during a rescue operation	The participant must be able to <ul style="list-style-type: none"> • communicate using the communication procedure(s) • tune in and use communication methods in an emergency. 	Practical exercises	MOB boat	
7.1 Check the very high frequency (VHF) radio permanently installed on board	The participant must be able to carry out <ul style="list-style-type: none"> • a functional test • a radio check. 	Practical exercises	MOB boat	Radio procedure

Topic	8.0 SEARCH AND RESCUE			
Competence objectives After completing the training, the participant will be able to:	Specification of competence objectives	Method	Learning environment	References
8.1 Plan and carry out a systematic search	The participant must be able to <ul style="list-style-type: none"> • carry out fan, parallel and square searches • select a search pattern in relation to conditions <ul style="list-style-type: none"> ○ weather ○ currents ○ type of object. 	Practical exercises Exercise with the whole MOB boat team collaborating	MOB boat	
8.2 Outline factors which affect the lookout's efficiency and prospects for detecting objects in the sea	The participant must be able to outline <ul style="list-style-type: none"> • sectorisation • properties of the object • working in parallel • weather conditions • speed • positioning in the boat. 	Theory lesson(s) Practical exercises	Classroom E-learning MOB boat	
8.3 Recover a person carefully from the sea with appropriate aids	The participant must be able to use <ul style="list-style-type: none"> • rescue grid/sealift • heaving line • boathook. 	Practical exercises Exercise with manikin and person	MOB boat	Manufacturer's manual
8.4 Demonstrate the ability to cope with spending time in the sea	The participant must be able to <ul style="list-style-type: none"> • cope with spending time in the sea • jump into the water from the boat • enter the boat from the sea • swim 30 metres with a line. 	Practical exercises	MOB boat Exercise in water	Norwegian Maritime Authority

Topic	9.0 PRACTICAL FIRST AID IN BOAT			
Competence objectives After completing the training, the participant will be able to:	Specification of competence objectives	Method	Learning environment	References
9.1 Perform appropriate first aid in the MOB boat on the basis of typical injuries encountered with a man-overboard operation.	The participant must be able to <ul style="list-style-type: none"> • examine the patient • stabilise and place the patient stably in the recovery position after a man-overboard operation • perform cardiopulmonary resuscitation (CPR) in the MOB boat • describe dangers when treating a person with hypothermia • outline causes of unconsciousness • describe at least two indications of injuries to <ul style="list-style-type: none"> ○ head ○ back ○ neck • perform clothes lift of a person with head, back or neck injuries • prepare the patient for transfer to another unit. 	Practical training with marker and dummy	MOB boat	

Topic	10.0 NIGHT OPERATION			
Competence objectives After completing the training, the participant will be able to:	Specification of competence objectives	Method	Learning environment	References
10.1 For small MOB boat only Handle an MOB boat at night	The participant must be able to <ul style="list-style-type: none"> • carry out a systematic search • use a compass • calculate distance. 	Practical training	MOB boat	
10.2 For large MOB boat only Handle an MOB boat in the dark	The participant must be able to <ul style="list-style-type: none"> • carry out a systematic search • use a compass, radar and GPS • calculate distance. 	Practical training	MOB boat	

3 ASSESSMENT AND DOCUMENTATION OF TRAINING

3.1 Assessment

The participant must be assessed during all practical exercises.

Should the participant fail the practical exercise, they must be given a reason.

On completion of the training, the participant will take a practical test.

Should the participant be assessed as falling short of the competence objectives, the participant must be failed.

3.2 Documentation

A course certificate must be issued on passing the course.

Valid course titles are

OSE114 Basic small MOB boat course

OSE1141 Basic large MOB boat course

4 REVISIONS

The following revisions have been made

Revision:	Date: