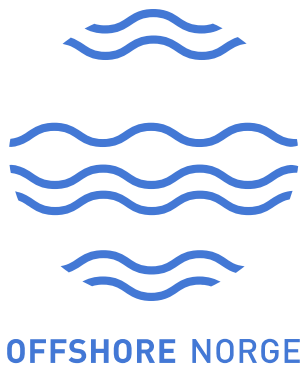




Offshore Norge

Training curriculum

Helicopter landing officer (HLO) refresher
course

Version no: 5

Date: 1 October 2025

FOREWORD

This training curriculum has been compiled for course providers approved by Offshore Norge to provide the HLO refresher course.

The training is intended to provide competence in the HLO function.

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

The contact for this training curriculum in Offshore Norge is the manager, expertise development.

Offshore Norge training curricula are owned by Offshore Norge.

See Offshore Norge 002 Recommended guidelines for safety and emergency preparedness training and requirements for safety and emergency response training.

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1 INTRODUCTION

1.1 Purpose

This training curriculum describes requirements for the content and execution of the helicopter landing officer (HLO) refresher course.

The training is designed to provide competence on:

- weather reporting, communication and routines
- dangerous goods
- aviation fuel
- normal operations on the helideck
- emergency operations on the helideck
- helicopter knowledge
- fire-fighting practice
- protective equipment

1.2 Learning outcomes

After completing the training, the participant must be able to:

- use the helideck manual
- communicate with and provide weather reports to helicopters
- handle dangerous goods
- describe and supervise the fuel system
- perform the HLO's duties in emergencies and in normal operations on the helideck
- use the correct extinguishing agent to put out a fire
- use personal and respiratory protective equipment

1.3 Target group

The target group for the training is personnel who are to exercise the helideck crew function.

2 CONTENT

2.1 Parameters for conducting the course

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

Theory: one instructor per 24 course participants.

Practical exercises: one instructor per six course participants.

Duration of the course is two days:

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

A minimum of ten hours of practical exercises.

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.

Combination course HLO refresher/ Search and Rescue refresher

This course can be completed as a combination course with Offshore Norge' Search and Rescue refresher course. The duration of the course is then 3 days.

2.2 Teaching materials

The Offshore Norge Recommended guidelines 074 - Helideck manual must be used as a teaching tool, other teaching materials used during the course must be tailored to the competence objectives specified in this training curriculum.

2.3 Prior knowledge

Basic HLO course.

"VHF/ SRC certificate.

A person who has not been in an emergency response role and has not completed an emergency response course or other equivalent training during the last 5 years, must complete a new basic course.

2.4 Instructor competence

Offshore helicopter pilot is required for teaching topic 1.

Experienced HLO¹ is required for teaching topic 3, 4, 5 and 6.

Personnel with firefighting experience is required for teaching topic 7 and 8.

2.5 Facilities and equipment

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

2.6 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.

¹ Experienced HLO here means a minimum of 5 years of experience from helideck with regular traffic and experience with fuel systems

Table 1: Training curriculum

Topic	1.0 WEATHER REPORTING, COMMUNICATION AND ROUTINES				
Competence objectives After completing the training, the participant will be able to:		Specification of competence objectives	Method	Learning environment	References
1.1 Carry out relevant communication with the helicopter		The participant must be able to communicate with the helicopter: • log and relay weather data • perform 20 min communication with helicopter during normal operations • perform deck clearance • perform communication with helicopter during abnormal incidents • marshalling signals	Theory lesson(s) Practical exercises	Classroom	074 - Offshore Norge recommended guidelines - Helideck manual (appendix F & H)
1.2 Describe weather factors which can affect risk during landing and take-off		The participant must be able to convey a general weather report to the helicopter pilot: • wind • turbulence • visibility • cloud base • temperature differences • pressure	Theory lesson(s)	Classroom E-learning	
1.3 Perform helideck report		The participant must be able to: • fill out a helideck form • interpret helideck movement data • know where to find any helideck restrictions that apply to the installation	Theory lesson(s)	Classroom E-learning	

Topic	1.0 WEATHER REPORTING, COMMUNICATION AND ROUTINES				
Competence objectives After completing the training, the participant will be able to:	Specification of competence objectives	Method	Learning environment	References	
1.4 Outline human factors which could influence helideck crew behaviour/ performance in various circumstances on the helideck	The participant must be able to outline: • communication • understanding the conditions • decisions • stress • attitudes • behaviour in abnormal circumstances	Theory lesson(s) Group discussions	Classroom		

Topic	2.0 DANGEROUS GOODS			
Competence objectives After completing the training, the participant will be able to:	Specification of competence objectives	Method	Learning environment	References
2.1 Identify and outline dangerous goods	The participant must be able to identify and outline for dangerous goods in accordance with the regulations, by completing the "Dangerous goods awareness" course that includes the following: • regulations • identification • concealed dangerous goods • dangerous goods in the possession of passengers and crew • classification • marking • emergency procedures • reporting	Theory lesson(s)	Classroom E-learning	BSL D 1-7 IATA DGR

Topic	3.0 AVIATION FUEL				
Competence objectives After completing the training, the participant will be able to:		Specification of competence objectives	Method	Learning environment	References
3.1 Outline the risks and factors of fuel and the main functions of the fuel system		The participant must be able to outline the risk factors: • risk factors (fire, water, particles, microorganisms) • health hazards and protective equipment used in connection with fuel handling • the main elements of the system (tank, pumps, filter, hose and filling guns) • challenges with the static electricity grounding of the facility	Theory lesson(s)	Classroom E-learning	074 - Offshore Norge recommended guidelines - Helideck manual (chapter 6)
3.2 Perform inspection and control of fuel and the fuel system		The participant must be able to outline: • checkpoints upon receipt of fuel tank • differential pressure • settling time • criteria for returning fuel The participant must be able to demonstrate: • use and assessment of Shells' water detector • use of curb weight • simple troubleshooting of the fuel system • use of a pressure filling gun The participant must be able to complete the filter follow-up log, refueling log and transport log.	Theory lesson(s) Practical troubleshooting of the fuel system	Classroom Fuel system simulator that reflects relevant design requirements in 074 - Offshore Norge recommended guidelines - Helideck manual (appendix I)	074 - Offshore Norge recommended guidelines - Helideck manual (chapter 6 and appendix C)

Topic	4.0 NORMAL OPERATIONS ON THE HELIDECK				
Competence objectives After completing the training, the participant will be able to:		Specification of competence objectives	Method	Learning environment	References
4.1 Outline the responsibilities and duties of the HLO in connection with arrival and departure		The participant must be able to outline: • correct clothing for helicopter deck crew • pre-use check of the helideck • procedures for using status/ repeater lights • procedures for lighting the helideck during landing in the dark • correct clothing for passengers • securing loose objects on and near the helideck • examples of handover to the next shift • reporting matters	Theory lesson(s) Group discussions	Classroom E-learning	074 - Offshore Norge recommended guidelines - Helideck manual (chapter 3)
4.2 Perform preparations before the helicopter arrives		The participant must be able to outline preparatory tasks from 30 minutes before arrival and until helicopter departure.	Theory lesson(s)	Classroom E-learning	074 - Offshore Norge recommended guidelines - Helideck manual (appendix F)

Topic	4.0 NORMAL OPERATIONS ON THE HELIDECK				
Competence objectives After completing the training, the participant will be able to:		Specification of competence objectives	Method	Learning environment	References
4.3 Perform helicopter handling on deck		The participant must be able to: • interpret the use of anti-collision lights as a signal to the helicopter deck crew • basic knowledge of helicopter weight and balance limitations • basic knowledge of danger areas around the helicopter The participant must be able to demonstrate: • safe loading and unloading of baggage in cargo holds with baggage restrictions • use of railings and wheel chocks • boarding and disembarking of passengers • positioning of XBR passengers • correct positioning of the helideck crew during the different phases when the helicopter is on deck	Practical exercises Group discussions	Helideck Classroom	074 - Offshore Norge recommended guidelines - Helideck manual (chapter 5 and appendix F)

Topic	5.0 EMERGENCY OPERATIONS ON THE HELIDECK				
Competence objectives After completing the training, the participant will be able to:		Specification of competence objectives	Method	Learning environment	References
5.1 Use emergency procedures in the event of a crash on the helideck		The participant must be able to: • open emergency exits on the helicopter types most commonly used offshore ○ windows and doors • use emergency equipment/tools for helicopter evacuation ○ equipment and tools as described in the helideck manual • perform an emergency stop of helicopter engines	Theory lesson(s) Practical exercises	Training field Simulator for emergency evacuation	
5.2 Evacuate injured people from the helicopter in an emergency		The participant must be able to evacuate injured people from the helicopter in an emergency.	Practical exercises	Helicopter/ training module	

Topic	6.0 HELICOPTER KNOWLEDGE				
Competence objectives After completing the training, the participant will be able to:		Specification of competence objectives	Method	Learning environment	References
6.1 Outline doors, cargo holds, and emergency exits on the types of helicopters in use on the Norwegian continental shelf		The participant must be able to outline: • opening and closing of entry doors on relevant helicopter types • opening and closing of cargo holds on relevant helicopter types • refueling and grounding on relevant helicopter types • anchoring points of relevant helicopter types hazardous areas and other details that may be dangerous on relevant helicopter types	Demonstration	Classroom	074 - Offshore Norge recommended guidelines - Helideck manual (appendix E)

Topic		7.0 FIRE-FIGHTING PRACTICE			
Competence objectives After completing the training, the participant will be able to:		Specification of competence objectives	Method	Learning environment	References
7.1 Use powder on the helideck		The participant must be able to use powder as an extinguishing agent: practical exercises in using the equipment	Practical exercises	Fire drill field	
7.2 Use water/powder in combination on the helideck		The participant must be able to use water/powder in combination as an extinguishing agent: practical exercises in using the equipment	Practical exercises	Fire drill field	
7.3 Use foam on the helideck		The participant must be able to use foam as an extinguishing agent: practical exercises in using the equipment	Practical exercises	Fire drill field	
7.4 Ventilate the helicopter cabin		The participant must be able to ventilate the helicopter cabin for fire gases.	Practical exercises	Fire drill field	

Topic	8.0 PROTECTIVE EQUIPMENT			
Competence objectives After completing the training, the participant will be able to:	Specification of competence objectives	Method	Learning environment	References
8.1 Use personal and respiratory protective equipment (PPE/RPE), and carry out safety checks and emergency procedures using this equipment	The participant must be able to: - describe the difference and distinction between complete and partial RPE - clarify, use and check PPE/RPE - reset PPE/RPE to zero - outline requirements for and limitations of fire-fighter clothing The participant must be able to carry out safety checks : - installation check - usage check - buddy check The participant must be able to demonstrate the use of emergency procedures: - failure of breathing apparatus - air cylinder valve stuck - mask clips loosened	Theory lesson(s) Practical exercises Demonstration	Fire drill field	

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.

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.

The course certificate expires on the last day of the 24th month after the most recent course.

4 REVISIONS

The following revisions have been made to this document:

Revisions:	Date:
Version no 5: <u>Chapt. 1.1:</u> Bullet points changed according to subject headings in 2.6. <u>Chapt. 2.1:</u> Minimum hours of practical exercises changed from 6 to 10 hours. Added section on combination course HLO refresher/ search and rescue refresher. <u>Chapt. 2.3:</u> Added "VHF/ SRC certificate". <u>Chapt. 2.4:</u> Changed from " A helicopter pilot or technician with offshore experience is required for teaching competence objectives 1.1 and 1.2." <u>Chapt. 2.6:</u> <u>Topic 1.0 Weather reporting, communication and routines:</u> Competence objective 1.1 on specification changed bullet point from " through the use of radio discipline, through the use of emergency signals". Removed e-learning as learning environment. Added reference. Competence objective 1.3 "perform helideck report" added as new competence objective. Previous competence objective 1.3 changed to 1.4. <u>Topic 2.0 Dangerous goods:</u> Competence objective 2.1 changed from "outline requirements for carriage of dangerous goods". Specification changed from "the participant must be able to outline the IATA (ICAO) requirements for carriage of dangerous goods by taking the dangerous goods	1 October 2025

awareness course: identification, reception, storage, loading/unloading, inspection, checking documents, emergency procedures". Removed group discussions and added theory lesson(s) as method. Added learning environment and reference.

Topic 3.0 Aviation fuel:

Competence objective 3.1 changed from "outline the risk factors for fuel and the fuel system". Specification changed from "the participant must be able to outline the risk factors: fire (static electricity), water, particles, microorganisms". Added reference.

Competence objective 3.2 specification changed from "The participant must be able to: conduct daily, weekly and monthly inspections, undertake light troubleshooting of filters, measure pressure variations in and pollution of fuel, fill out logs and check certificates. The participant must be able to verify that the system is certified and operational." Added theory lesson(s) as method. Added learning environment and reference.

Topic 4.0 Normal operations on the helideck:

Title of topic changed from "emergency and normal operations on the helideck".

Previous competence objective 4.1 "outline the helideck crew's responsibilities and duties during normal operations" removed.

Competence objective 4.1 "outline the responsibilities and duties of the HLO In connection with arrival and departure" added as new competence objective.

Previous competence objective 4.2 "use emergency procedures in the event of a crash on the helideck" has been moved to topic 5 (competence objective 5.1).

Competence objective 4.2 "perform preparations before the helicopter arrives" added as new competence objective.

Previous competence objective 4.3 "assess dangers in normal operations" removed.

Competence objective 4.3 "perform helicopter handling on deck" added as new competence objective.

Previous competence objective 4.4 "evacuate injured people from

the helicopter in an emergency" has been moved to topic 5 (competence objective 5.2). <u>Topic 5.0 Emergency operations on the helideck:</u> Added as a new topic (formerly part of topic 4). Competence objective 5.1 "use emergency procedures in the event of a crash on the helideck" is previous competence objective 4.2. Competence objective 5.2 "evacuate injured people from the helicopter in an emergency" is previous competence objective 4.4. <u>Topic 6.0 Helicopter knowledge:</u> Added as new topic. <u>Topic 7.0 Fire-fighting practice:</u> Previous topic 5.0 fire-fighting practice. Previous competence objective 5.1 changed to 7.1. Previous competence objective 5.2 changed to 7.2. Previous competence objective 5.3 changed to 7.3. Competence objective 7.4 "ventilate the helicopter cabin" added as new competence objective. <u>Topic 8.0 Protective equipment:</u> Previous topic 6.0 protective equipment. Previous competence objective 6.1 changed to 8.1.	
Version no 4: <u>Chapt. 2.3:</u> Added "A person who has not been in an emergency response role and has not completed an emergency response course or other equivalent training during the last 5 years, must complete a new basic course."	31 May 2023
Version no 3: <u>Chapt. 1.1 Purpose</u>	30 January 2020

Removed (for personnel who require this competence) <u>Chapt. 1.2 Learning outcomes</u> Removed (for personnel who require this competence) <u>Chapt. 1.3 Target group</u> Removed sentence: Protective equipment is a <u>separate module</u> taken only by personnel who require this competence. <u>Chapt. 2.1 Parameters for conducting the course</u> Removed: <u>Protective equipment</u> The protective equipment module takes two hours. <u>Chapt. 2.2 Teaching materials</u> Added: The Offshore Norge Recommended guidelines 074 - Helideck manual	
Version no 2: <u>Chapt. 2.4 Instructor competence</u> The following sentence: "A helicopter pilot or technician with offshore experience is required for teaching competence objective 1.1." has been changed to: "A helicopter pilot or technician with offshore experience is required for teaching competence objectives 1.1. and 1.2." <u>Chapt. 3.1 Assessment</u> The following sentence has been removed: "Once the course has been completed, the participant must be tested on theory."	March 2017