
Norwegian Oil and Gas training curriculum

Helicopter landing officer (HLO) refresher course

Version no: 3

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FOREWORD

This training curriculum has been compiled for course providers approved by Norwegian Oil and Gas 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 Norwegian Oil and Gas is the manager, expertise development.

Norwegian Oil and Gas training curricula are owned by Norwegian Oil and Gas.

See [Norwegian Oil and Gas 002 Recommended guidelines for safety and emergency preparedness training](#) and requirements for safety and 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 Instructor competence	5
2.5 Facilities and equipment	5
2.6 Training curriculum	6
3 ASSESSMENT AND DOCUMENTATION OF TRAINING.....	14
3.1 Assessment	14
3.2 Documentation.....	14
4 REVISIONS.....	15

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
- emergencies and normal operations on the helideck
- fire-fighting practice
- protective equipment (for personnel who must have this competence)

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 (for personnel who require this competence)

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, including the protective equipment module.

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

A minimum of six 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.

2.2 Teaching materials

The Norwegian Oil and Gas 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.

2.4 Instructor competence

A helicopter pilot or technician with offshore experience is required for teaching competence objectives 1.1 and 1.2.

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.

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; <ul style="list-style-type: none"> • through the use of radio discipline • through the use of emergency signals • with hand signals 	Practical exercises		
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; <ul style="list-style-type: none"> • wind • turbulence • visibility • cloud base • temperature differences • pressure 	Group discussions		
1.3 Outline human factors which could influence helideck crew behaviour/ performance in various circumstances on the helideck	The participant must be able to outline; <ul style="list-style-type: none"> • communication • understanding the conditions • decisions • stress • attitudes • behaviour in abnormal circumstances 	Group discussions		

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 Outline requirements for carriage of dangerous goods	The participant must be able to outline the IATA (ICAO) requirements for carriage of dangerous goods by taking the dangerous goods awareness course; <ul style="list-style-type: none"> • identification • reception • storage • loading/unloading • inspection • checking documents • emergency procedures 	Group discussions		

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 risk factors for fuel and the fuel system	The participant must be able to outline the risk factors; <ul style="list-style-type: none"> • fire (static electricity) • water • particles • microorganisms 	Group discussions	Classroom	
3.2 Inspect and check fuel and the fuel system	The participant must be able to; <ul style="list-style-type: none"> • 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 <p>The participant must be able to verify that the system is certified and operational.</p>	Practical troubleshooting of the fuel system		

Topic	4.0 EMERGENCIES AND 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 helideck crew's responsibilities and duties during normal operations	<p>The participant must be able to outline the helideck crew's duties before, during and after landing;</p> <ul style="list-style-type: none"> • handle and secure baggage and cargo • start/stop procedures • passenger handling • lashing/securing the helicopter • cargo hold restrictions • helicopter weight and balance requirements • checking manifests 	Group discussions	Classroom	
4.2 Use emergency procedures in the event of a crash on the helideck	<p>The participant must be able to;</p> <ul style="list-style-type: none"> • open emergency exits on the helicopter types most commonly used offshore <ul style="list-style-type: none"> ○ windows and doors • use emergency equipment/tools for helicopter evacuation <ul style="list-style-type: none"> ○ equipment and tools as described in the helideck manual • perform an emergency stop of helicopter engines 	Practical exercises	<p>Training field</p> <p>Simulator for emergency evacuation</p>	

4.3 Assess dangers in normal operations	The participant must be able to assess hazardous areas; <ul style="list-style-type: none">• rotor disc• tail rotor• noise• wind• passengers/unauthorised persons on deck• helicopter in motion	Theory lesson(s)	Classroom E-learning	
4.4 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		5.0 FIRE-FIGHTING PRACTICE		
Competence objectives After completing the training, the participant will be able to:	Specification of competence objectives	Method	Learning environment	References
5.1 Use powder on the helideck	The participant must be able to use powder as an extinguishing agent; <ul style="list-style-type: none"> practical exercises in using the equipment 	Practical exercises	Fire drill field	
5.2 Use water/powder in combination on the helideck	The participant must be able to use water/powder in combination as an extinguishing agent; <ul style="list-style-type: none"> practical exercises in using the equipment 	Practical exercises	Fire drill field	
5.3 Use foam on the helideck	The participant must be able to use foam as an extinguishing agent; <ul style="list-style-type: none"> practical exercises in using the equipment 	Practical exercises	Fire drill field	

Topic		6.0 PROTECTIVE EQUIPMENT		
Competence objectives After completing the training, the participant will be able to:	Specification of competence objectives	Method	Learning environment	References
6.1 Use personal and respiratory protective equipment (PPE/RPE), and carry out safety checks and emergency procedures using this equipment	<p>The participant must be able to;</p> <ul style="list-style-type: none"> • 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 <p>The participant must be able to carry out safety checks ;</p> <ul style="list-style-type: none"> • installation check • usage check • buddy check <p>The participant must be able to demonstrate the use of emergency procedures;</p> <ul style="list-style-type: none"> • failure of breathing apparatus • air cylinder valve stuck • mask clips loosened 	<p>Theory lesson(s) Practical exercises Demonstration</p>	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:

Revision	Date
<p>Version 3</p> <p>Chapt. 1.3 Target group Removed sentence: Protective equipment is a <u>separate module</u> taken only by personnel who require this competence.</p> <p>Chapt. 2.1 Parameters for conducting the course Removed: <u>Protective equipment</u> The protective equipment module takes two hours.</p> <p>Chap. 2.2 Teaching materials Added: The Norwegian Oil and Gas Recommended guidelines 074 - Helideck manual</p>	<p>January 2020</p>
<p>Version 2:</p> <p>Chapt. 2.4 Instructor competence</p> <p>The following sentence: “A helicopter pilot or technician with offshore experience is required for teaching competence objective 1.1.”</p> <p>has been changed to:</p> <p>“A helicopter pilot or technician with offshore experience is required for teaching competence objectives 1.1. and 1.2.”</p> <p>Section 3.1 Assessment</p> <p>The following sentence has been removed:</p> <p>“Once the course has been completed, the participant must be tested on theory.”</p>	<p>March 2017</p>
