Basic Offshore Safety Induction and Emergency Training (with Compressed Air Emergency Breathing System) 20hrs35min



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Description Training

OPITO has been setting standards for the oil and gas industry since 1991 to help improve workforce safety and competence - over 350,000 people per year train to OPITO Standards across the globe.

In partnership with industry stakeholders, OPITO identifies the needs and requirements for new and improved training and competence standards for both onshore and offshore. O Opito produce world-class, industry-driven standards that are recognised globally and we ensure that your approved training providers deliver training in compliance with these standards.

Learning outcomes of the BOSIET (with CA-EBS) Program content / Workload

Unit Code	Unit Title	
OIS-01	Safety Induction	
OIS-78	Helicopter Safety and Escape CA-EBS	
OIS-03	Sea Survival and First Aid	
OIS-04	Firefighting and Self Rescue	

Unit Code	9	OIS-01
Title		Safety Induction
Guided Le	earning Hours	3 hours and 20 mins
		OUTCOMES
1. 0	utcome: Typica	l offshore oil and gas activities
The learn	er will understa	nd:
		CRITERIA
L.1 Typical	offshore oil and a	gas activities
l.2 Format	tion, finding and e	exploitation of oil and gas; how hydrocarbons are formed, foundand produced
	of offshore instal	lations, specialist vessels and their main functions andfeatures; to include:
L.3 Types	0. 0	actions, operation records and their manners and and earlies est to include
		k-up, semi-sub, drill ship
1.3.1	Drilling – jac	•
1.3.1 1.3.2	Drilling – jac Production -	k-up, semi-sub, drill ship
1.3 Types 1.3.1 1.3.2 1.3.3 1.3.4	Drilling – jac Production -	k-up, semi-sub, drill ship oil and gas, gas, fixed,floating n – heavy lift, pipe laying



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1.4	The offshore environment, to include:		
1.4.1	Remote nature		
1.4.2	Harsh conditions		
1.4.3	Proximity of various environments		
	OUTCOMES		
2 Tha 1a	Outcome: The main offshore hazards		
i ne ie	earner will understand:		
	CRITERIA		
2.1	A hazard, risk and control measure		
2.2	Accident statistics when compared withother industries		
2.3	Offshore hazards and comparative risklevels to include:		
2.3.1	Pressure hazards, to include: oil/gasreservoir, process/drilling pipework, water/gas		
	injection, gas and compression		
2.3.2	Motion hazards, to include: drilling tubulars, exposed machinery parts, movingheavy		
	equipment and manual handling		
2.3.3	Chemical hazards, to include: drillingchemicals, reservoir fluids/gases (includingH2S),		
	process chemicals and solvents		
2.3.4	Electrical hazards, to include: maintenance of electrical equipment, faultyelectrical		
	equipment		
2.3.5	Gravity hazards, to include: working under suspended loads, working at heightsand slips		
	and trips		
2.3.6	Noise hazards, to include: working inprocess areas, drilling areas, helicopter areas and		
2 2 7	noise exposure levels		
2.3.7	Hazardous atmospheres, to include an explanation of how areas are designated		
2.3.8	hazardous zones		
2.3.8	Confined space hazards, to include he following characteristics: limited openings for		
	entry or exits, confined spaces when working inside containers or vessels and unfavourable natural ventilation		
	OUTCOMES		
	utcome: The potential environmental impact of offshore installation operations		
i ne ie	earner will understand:		
	CRITERIA		
3.1 Env	3.1 Environmental impact and statistics		
	OUTCOMES		
4 0	utcome: The principles of managing safety on offshore installations		
The learner will understand:			
	CRITERIA		



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- 4.1 The multiple barriers model and systems inplace to prevent hazards from contacting targets, including:
- 4.1.1 Safe Systems of Work (SSOW)
- 4.1.2 Personal Responsibility for Safety(PRfS)
- 4.1.3 Safety observation programmes

OUTCOMES

Outcome: Hazard effects and consequences; their associated risks, and how they are controlled

The learner will understand:

CRITERIA

- 5.1The hierarchy of control and how control measures are implemented offshore
- 5.2 Risks and implementation of control measures to include:
 - 5.2.1 Reservoir/pipe work isolation
 - 5.2.2 Blowout preventers (BOP)
 - 5.2.3 Training on handling tubulars
 - 5.2.4 Guarding of machinery
 - 5.2.5 MSDS/ chemical and dust protection
 - 5.2.6 Electrical isolation
 - 5.2.7 Fall protection
- 5.3 The consequences of failing to control therisks

OUTCOMES

6 Outcome: Key offshore installation safety regulations and the basic concept of these regulations

The learner will understand:

CRITERIA

- 6.1How offshore safety is regulated to include:
- 6.1.1 Applicable legislation
- 6.1.2 Legislative requirements
- 6.1.3 Legal responsibilities
- 6.1.4 Role of industry organisations
- 6.1.5 Documenting the safety management systems



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- 6.2 The hierarchy of legislation
- 6.3 Directives
- 6.4 Safety Case regulations to include:
- 6.4.1 Identification of major hazards, risksand control measures
- 6.4.2 How safety is audited
- 6.4.3 Acceptance by the health and safety regulator
- 6.4.4 Verification of safety critical systems
- 6.4.5 Performance standards
- 6.5 The duties of the employer and employees and the concept of ALARP
- 6.6 How goals are set for prevention/protectionand emergency response, emergency response planning and performance standards
- 6.7 The role of the Health & Safety Authorities to include:
- 6.7.1 Scope
- 6.7.2 Activities
- 6.7.3 Powers of the Health & Safety Inspector
- 6.8 Relevant ISO standards, to include ISO14001
- 6.9 Industry expectations of personal safety behaviour, to include
- 6.9.1 The industry's expected standards for safety
- 6.9.2 Typical behavioural safety tools

OUTCOMES

Outcome: Key information and policies to ensure the health, safety and wellbeing of those living and working offshore.

The learner will understand:

- **7.1** Fitness requirements and medical standards
- 7.2 The procedure for taking prescribed medicines offshore
- 7.3 Identify alcohol and substance abuse policies
- 7.4 Offshore requirements and welfare to include:



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7.4.1	Administration requirements
7.4.2	Requirements on arrival on an offshore installation
7.4.3	Items permitted/not permitted offshore
7.4.4	Installation induction
7.4.5	Safety constituencies
7.4.6	Role of safety representatives and safety committees
7.4.7	Responsibilities of employers
7.4.8	Employee line of reporting
7.4.9	Cabin/laundry/bond
7.4.10	Recreation/smoking
7.4.11	Getting on with others
7.5 Wo	rking routines to include:
7.5.1	Procedures
7.5.2	Work authorisation
7.5.3	Personal Protective Equipment (PPE)
7.5.4	Maintaining a safe workplace
7.5.5	Waste disposal
7.6 Invo	olvement in safety to include:
7.6.1	Observation systems
7.6.2	PTW
7.6.3	Toolbox talks
7.6.4	Safety meetings
7.6.5	Drills and exercises
7.6.6	Additional emergency response duties
7.6.7	Getting involved
7.7 Con	nmunicating safely, including lines ofcommunication
	at to do when not satisfied with responseto safety communication to include:
	Contacting immediate supervisor
7.8.2	
	Safety Representative
7.8.4	Health & Safety Regulator
7.9	Injuries and illness to include:
7.9.1	Reporting incidents, accidents, nearmisses and illnesses
	The role of the offshore medic
7.9.3	First aid arrangements offshore



7.9.4 Investigation of incidents and accidents

7.9.5 Preventing a recurrence

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7.9.6 Support available to relatives in the event of illness/injury/majorincident/evacuation

Unit Code OIS-78		
Title	Helicopter Safety and Escape CA-EBS	
Guided Learning Hours	6 hours	
OUTCOMES		
1 Outcome: Helicopter Travel		
The learner will understand:		
CRITERIA		

- 1.1 Pre-flight briefings
- 1.2 The procedures and requirements for pre-boarding, safe boarding, in-flight and safe disembarkation including:
 - 1.1.1 Arrival time
 - 1.1.2 Correct dress
 - 1.1.3 Documentation
 - 1.1.4 Prohibited articles
 - 1.1.5 Check-in procedures
 - 1.1.6 Safe boarding
 - 1.1.7 Pre-flight video
- 1.3 *Learners must be made aware that they should ensure they familiarise themselves with the aviation transit suit they are expected to use before boarding a helicopter.
 - *This is in addition to the information detailedduring pre-flight briefings. *Note: There are various types of aviation transit suits being used in the industry. Although one type of aviation transit suit will be used in the trainingcentre where the learner is trained, it is important that the learner is made aware thatother types will be used in other regions/areas

Note 2: This criteria should be omitted when delivering as part of Product 5754.

OUTCOMES

3 Outcome: Helicopter Emergencies

The learner will understand:

- 2.1 Informing the crew of suspected or observed helicopter emergencies, toinclude:
 - 2.1.1 Discovering a fire
 - 2.1.2 Smoke
 - 2.1.3 Fuel leaks
 - 2.1.4 Abnormal conditions which the crewmay not be aware of



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- 2.2 In-flight procedures to include:
 - 2.2.1 Don hood ensure survival suit iszipped up
 - 2.2.2 Check seat belt is tight, and lifejacketis secure
 - 2.2.3 Following crew instructions

Note: Criteria 2.2.1 should be omitted when delivering as part of Product 5754.

- 2.3 Aircraft basic flotation characteristics
- 2.4 Aircraft escape routes for ditching and emergency landing
- 2.5 Independent action
 - Survival techniques following ditching and
- 2.6 emergency landing either on land or inwater
 - How to don an aviation transit suit (of a type
- 2.7 typically used in the region/area of operations) compressed air breathing system (CAEBS) and an aviation lifejacket
 - Note: This criteria should be omitted when delivering as part of Product 5754.
- 2.8 Actions in preparation for a helicopter ditching and emergency landing, including brace positions for the range of seating locations and harness types
- 2.9 Helicopter evacuation, to include:
 - 2.9.1 Locate
 - 2.9.2 Release (on-command)
 - 2.9.3 Evacuating through nominated exits and push-out windows: on-water, underwater and capsize.
 - 2.9.4 Impact attenuating seats, to include purpose and operation of seat and evacuation technique (demonstration not required, this will be achieved by the use of video Or slides)
- 2.10 Emergency equipment onboard the helicopter, including stowage location of aviation liferaft, operation and entry
- 2.11 Initial actions on boarding the aviation liferaft i.e. how to use mooring lines, deploying the sea anchor, raising the canopy and raft maintenance
- 2.12 Use of aviation liferaft equipment and secondary actions on boarding the aviationliferaft, to include e.g. posting lookouts, activating the radio beacons and first aid

Note: Secondary actions do not need todemonstrated

OUTCOMES

4 Outcome: Use of Compressed Air Emergency Breathing System (CA-EBS)

The learner will understand:



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CRITERIA

- The principles of compressed air emergency breathing systems (CA-EBS)
- 3.2 The principles of other typical emergency breathing systems (EBS) used in the oil andgas industry (i.e. re-breather systems)
- 3.3 The principles of compressed air emergency breathing systems (CA-EBS)
- 3.4 The principles of other typical emergency breathing systems (EBS) used in the oil andgas industry (i.e. re-breather systems)
- 3.5 The components and elements of the CA-EBS, including:
- 3.5.1 Hose (if fitted)
- 3.5.2 Mouthpiece
- 3.5.3 Cylinder
- 3.5.4 Demand Valve
- 3.5.5 Pressure indicator
- 3.5.6 On/Off ratchet/knob (if fitted)
- 3.5.7 On/Off Status Indicator (if fitted)
- 3.5.8 Purge button
- 3.5.9 Nose clip (if fitted)
- 3.5.10 Charging Port
- 3.4 The operation of the compressed air EBS equipment in conjunction with other survivel equipement:
 - 3.4.1 Life jacket
- 3.4.2 Survival suit (including importance of correctly sized suit)
- 3.4.3 Personal Locator Beacon (PLB)

Note: Criteria 3.4.2 should be omitted when delivering as part of Product 5754.

- 3.5 The hazards associated with compressed airEBS:
- 3.5.1 Medical hazards associated with lung over-expansion injuries
- 3.5.2 Gasp reflex associated with cold water entry shock
- 3.5.3 Coughing
- 3.5.4 Dislodged mouthpiece (accidental or intentional)
- 3.5.5 Accidental or deliberate loss of air including purging and hazards of incorrect purging
- 3.5.6 Running out of air
- 3.6 The pre-donning checks on the life jacket and compressed air EBS, including:
- 3.6.1 Pressure indicator reading



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3.6.2	Appropriate on/off status indicator (if fitted)		
3.6.3	Ratchet knob on/off (if fitted)		
3.7	How to don the life jacket complete whith compressed air EBS:		
3.7.1	Ensuring life jacket waist belt is nottwisted (if fitted)		
3.7.2	Fastening of life jacket		
3.7.3	Adjustment of waist belt to ensure correct fit		
3.7.4	Engagement of crotch strap ensuring acorrect fit and roll away and securing of excess webbing (if fitted)		
3.7.5	Ensure CA-EBS mouthpiece is correctly fitted		
3.7.6	Ensure CA-EBS hose is correctly fitted(where appropriate)		
3.8	Deployment of CA-EBS, including:		
3.8.1	One handed deployment of the mouthpiece and nose clip in accordance with		
	manufacturers' guidelines		
3.8.2			
3.8.3	How to purge water from the mouthpiece		
3.8.4	How to recover a dislodged mouthpiece		
3.8.5	Use of demand valve		

OUTCOMES

4. Outcome: Use of Compressed Air Emergency Breathing System (CA-EBS)

The learner will perform:

- 4.1The pre-donning checks on the life jacket and compressed air EBS, including:
 - 4.1.1 Pressure indicator reading
 - 4.1.2 Appropriate on/off status indicator (iffitted)
 - 4.1.3 Ratchet knob on/off (if fitted)
- 4.2 How to don the life jacket complete with compressed air EBS:
 - 4.1.4 Ensuring life jacket waist belt is nottwisted (if fitted)
 - 4.1.5 Fastening of life jacket
 - 4.1.6 Adjustment of waist belt to ensurecorrect fit
 - 4.1.7 Engagement of crotch strap ensuring acorrect fit and roll away and securing of excess webbing (if fitted)
 - 4.2.5 Ensure CA-EBS mouthpiece s correctly fitted
 - 4.2.6 Ensure CA-EBS hose is correctly fitted(where appropriate)



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- 4.3 Deployment of CA-EBS, including:
 - 4.3.1 One handed deployment of the mouthpiece and nose clip in accordance with manufacturers' guidelines
 - 4.3.2 How to achieve a good seal around mouthpiece
 - 4.3.3 How to purge water from the mouthpiece
 - 4.3.4 How to recover a dislodged mouthpiece
 - 4.1.8 Use of demand valve

OUTCOMES

5. Outcome: Practical Helicopter Escape Techniques

The learner will perform:

CRITERIA

5.1 Donning of an aviation transit suit, anaviation life jacket, compressed air emergency breathing system (CA-EBS) equipment and conducting integrity checks of the CA-EBS equipment, including byddy ckecks

Note: This criteria should be omitted when delivering as part of Product 5754.

- 5.2 Deploying (left and right hand) and breathing from CA-EBS equipment at atmospheric pressure in dry conditions
- 5.3 Actions to take in preparing for a helicopter emergency landing
- 5.4 Following instruction from the crew, locationof CA-EBS equipment and evacuation from a helicopter using a nominated exit, following a controlled emergency descent to a dry landing (conducted in helicoptersimulator at poolside on dry land)
- 5.5 Actions to be taken in preparing for an in-water ditching including location of exit, deploying and breathing from CA-EBS equipment at atmospheric pressure in dry conditions (conducted in helicoptersimulator at poolside on dry land)
- 5.6 Dry evacuation, using a nominated exit, to an aviation life raft from a helicopter ditched
- on water (and, on instructions from theaircrew, operation of a push out window), assisting others where possible and carrying out initial actions on boarding the aviation life raft, to include: mooring lines, deploying the sea anchor, raising the canopy and raft maintenance
- 5.7 Escaping through a window opening which is underwater, from a partially submerged helicopter (without operation of a push outwindow)
- 5.8 Escaping through a window opening which is underwater, from a partially submerged helicopter (with operation of a push out window)
- 5.9 Escaping through a window opening which is underwater, from a capsized helicopter (without operation of a push out window)



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5.10 Inflation of an aviation lifejacket, deployment of a spray visor and boarding of an aviation life raft from the water

OUTCOMES

6. Outcome: Additional CA-EBS Training (In-Water)

The learner will perform:

- 6.1 Deploying CA-EBS (above the water surface) and breathing from the CA-EBS in a pool, face down in shallow water (at a maximum depth of 0.7m, measured at the chest)
- 6.2 Deploying CA-EBS (below the water surface, face down in a pool in shallow water) and clearing the mouthpiece by exhaling underthe water surface (at a maximum depth of 0.7m, measured at the chest)
- 6.3 Deploying CA-EBS (below the water surface, face down in a pool in shallow water, using opposite hand to previous exercise) and clearing with purge button under the water surface (at a maximum depth of 0.7m, measured at the chest)
- 6.4 Deploying CA-EBS (above water surface), ina pool and breathing from CA-EBS underwater in a vertical position (at a maximum depth of 0.7m, measured at thechest)
- 6.5 Deploying CA-EBS (underwater), in a pool and breathing from CA-EBS underwater in avertical position (at a maximum depth of 0.7m, measured at the chest)
- 6.6 Deploying CA-EBS (underwater), in a pool, breathing from CA-EBS underwater, and moving along a horizontal rail for a period ofno less than 30 seconds, including a changein direction (at a maximum depth of 0.7m, measured at the chest)



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Unit Code	OIS-03
Title	Sea Survival and First Aid
Guided Learning Hours	6 hours 20 mins

OUTCOMES

1. Outcome: Evacuation Methods and Procedures

The learner will understand:

- 1.1 Typical types of offshore installation emergencies to include floating installations such as FPSOs and drilling rigs
- 1.2 Station bills
- 1.3 Various means of escape
- 1.4 Actions to be taken prior to, during and after selective evacuation or escape from an offshore installation
- 1.5 Installation emergency knowledge required of all personnel onboard, to include:
- 1.5.1 Typical layout of installations (escape routes, temporary refuge, muster locations, abandonment locations, access routes including helideck, bridge landing points and tertiary escape points)
- 1.5.2 Installation alarms and communications (locations, use and appropriate response)
- 1.5.3 The possibility of devolved command within the installation's organizational structure and appropriate procedures and actions should this occur
- 1.5.4 The need for and use of personal protective equipment (PPE) e.g. gloves, torch, smoke hoods, survival/abandonment suits and donning a life jacket etc
- 1.6 The SAR organisation, means of rescue from the sea and survival craft and actions to take during rescue
- 1.7 Rescue by helicopter winchman duties, the hi-line, double lift and single lift (as a minimum: the single lift to be demonstrated practically)
- 1.8 The importance of appropriate personal clothing
- 1.9 Methods of rescue i.e. standby vessel, FRC, MRRD, net, basket and ladder (this may be achieved by the use of video or slides)
- 1.10 The various types of survival craft (TEMPSC) freefall/single/twin
- 1.11 The function and capabilities of TEMPSC (e.g. air supply, fire protection, buoyancy)
- 1.12 The procedure for mustering, boarding and strapping in, including the safety precautions during



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lowering and release, emergency equipment and supplies

- 1.13 The various methods of tertiary escape (this may be achieved by the use of video or slides) to include:
- 1.13.1 Knotted rope
- 1.13.2 Scramble net
- 1.13.3 Davit-launched life raft
- 1.13.4 Ladders
- 1.13.5 Person descending escape devices

Note: Minimum of one of the above methods is to be demonstrated practically

OUTCOMES

1 Outcome: Emergency First Aid

The learner will understand

- 2.1 First aid arrangements
- 2.2 Types of injuries, to include:
- 2.2.1 Bleeding/burns (immediate action)
- 2.2.2 Chemical contact
- 2.2.3 Exposure to the elements (heat and cold)
- 2.3 Prioritising actions
- 2.4 Immediate first aid actions suitable foruse prior to the arrival of the medic / first aider, to include:
- 2.4.1 Assessing the situation do not put yourself (or others) in danger.
- 2.4.2 Making the area safe
- 2.4.3 Assess all casualties and attend to any unconscious casualties.
- 2.4.4 Send for help as soon as possible.
- 2.5Raising the alarm
- 2.6Assessing the situation
- 2.7 Checking the area is safe
- 2.8 Checking airways, breathing and industry recognised first aid practice*
- (*)Industry recognised first aid practice –this may vary depending on first aid practice guidelines adopted in different countries/regions.
- 2.9 Putting the casualty in the recoveryposition



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OUTCOMES

3.Outcome: Muster and actions uponboarding a survival craft (TEMPSC)
The learner will perform:

CRITERIA

3.1 Mustering, donning a life jacket, boarding and strapping in as a TEMPSC passenger (the craft then to be lowered into water and released).

OUTCOMES

4. Outcome: Sea Survival and emergency In-water actions

The learner will perform:

CRITERIA

- 4.1 Water entry (stepping off poolside, maximum 1m height) and the precautions when entering the water
- 4.2 The fitting of a helicopter rescue devise, subsequent lifting and (simulated) entry into a rescue helicopter including:
 - 4.2.1 Single strop, double strop or basket (minimum of one method to bedemonstrated practically)
 - 4.2.2 Body posture
 - 4.2.3 Aircraft entry

In-water survival techniques, to include:

- 4.3 individual (swimming, HELP, wave slap protection) and group survival techniques (towing, chain,huddle and circle), followed by rescue by one of the recognized methods available offshore.
- 4.4 Boarding a marine life raft from the water and carrying out initial actions, toinclude mooring lines, deploying the sea anchor, raft maintenance and secondary actions, to include posting lookouts, activating the radio beacons and first aid equipment

(Note: Instructors need only explain secondary actions i.e. no need for instructors or learners to demonstrate).

OUTCOMES

5. Outcome: Immediate First Aid Actions

The learner will perform:



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- 5.1 Raising the alarm
- 5.2 Assessing the situation
- 5.3 Checking area is safe
- 5.4 Industry recognized first aid practice*
- * Industry recognised first aid practice this may vary depending on first aid practice guidelines adopted in different countries/regions

Unit Code	OIS-04
Title	Firefighting and Self Rescue
Guided Learning Hours	4 hours

OUTCOMES

1.Outcome: Common causes of offshore fires and actions to be taken The learner will understand:

- 1.1 The common causes and nature of fires onboard offshore oil and gas installations with an emphasis on electrical, domestic and welding related fires
- 1.2 The "triangle of combustion" and how fire can spread, to include: conduction, convection and radiation
- 1.3 Media to include water, dry powder, foam and CO2
- 1.4The purpose of fixed fire and gas detection and firefighting systems
- 1.5 Actions and precautions to take in areas where these systems are deployed in respect of those having an effect on a person's health and safety i.e. deluge, halon (and halon replacement extinguishant), CO2, andthe urgent need to evacuate the area if the extinguishant has been released
- 1.6 Action to take on discovering a fire (installation emergency procedures) with emphasis on:
- 1.6.2 Raising the alarm
- 1.6.2 Explain locations of portable handheld firefighting equipment (types to be used during practical session)
- 1.6.3 Evacuation to designated area.
- 1.7 The operation of handheld portable fire extinguishers, small bore fire hose reels, fire blankets and their use against actual Class A and Class B fires as appropriate



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2 Outcome: Self-rescue equipment and techniques

The learner will understand:

CRITERIA

- 2.1 The selection of smoke type hoods
- 2.2 The donning of smoke type hoods
- 2.3 Self-rescue techniques with and without respiratory protection from areas which are being subjected to smoke and heat
- 2.4 Small group escape techniques with respiratory protection from an area which is being subjected to smoke and heat

OUTCOMES

3 Outcome: Raising the alarm and operation of hand-held extinguishers The learner will perform:

CRITERIA

- 3.1 Raising the alarm on discovery of afire
- 3.2 Correct operation of handheld portable fire extinguishers in extinguishing Class A or Class B fires.

OUTCOMES

4. Outcome: Outcome: Self-Rescue Techniques

The learner will perform:

CRITERIA

- 4.1 Techniques with a smoke hood or partial blindfold from areas where delegate visibility is reduced
- 4.2 Self-rescue techniques with a smoke hood or partial blindfold from areas where delegate visibility is completelyobscured

This exercise may be achieved by conducting exercises in darkness orby using "blacked out" smoke hoodsor partial blindfolds.

Note: smoke hoods to be used incosmetic smoke only

4.3 Small group escape techniques with asmoke hood or partial blindfold from areas where delegate visibility is completely obscured concluding with a muster exercise

This exercise may be achieved by conducting exercises in darkness orby using "blacked out" smoke hoodsor partial blindfolds.

Note: smoke hoods to be used incosmetic smoke only.



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Practical training

Practical training areas designed to enable each learner to individually, or as part of a team, to view, hear and practise the following:

- 1) Dry evacuation into an aviation liferaft on water from a helicopter trainer.
- 2) Escape from a partially submerged helicopter trainer through an exit that is underwater.
- 3) Escape from a capsized helicopter trainer and use of a lifejacket.
- 4) Evacuate from a helicopter trainer following an emergency dry landing.
- 5) Operation of emergency exits and push-out windows of a type currently found on helicoptersoperating offshore.
- 6) Donning of compressed air emergency breathing system equipment and an aviation lifejacket
- 7) Operation and use of compressed air emergency breathing system
- 8) Operation of an aviation liferaft.
- 9) The donning of a permanent buoyancy life jacket.
- 10) The use of a helicopter lifting device and winching to a simulated rescue aircraft.
- 11) The boarding of a marine life raft from the water
- 12) In-water procedures, including individual and group survival techniques, followed by rescue byone of the recognised methods available offshore.
- 13) Mustering, boarding and strapping in as a TEMPSC passenger (the craft then to be loweredinto water to float and be released).
- 14) The use of portable fire extinguishers on a range of fires of surface area 0.1 m2 to 1.0 m2against the following:
 - a) Class A fire
 - b) Class B contained spill.
- 15) The donning and wearing of a smoke hood in an area that can be smoke logged using cosmetic smoke.
- Dedicated concreted area with adequate drainage to allow the delivery of all firefightingexercises for 16 learners, instructors and support staff.

Training Organization Form

Face to Face Presential

Training Methodologies

The methods to be used will be expository, demonstrative and participatory / active.



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Learning Assessment Methodologies
Learning outcomes of the BOSIET (with CA-EBS)

CEDROS must ensure that all trainees pass the theoretical component of the training before undertaking the practical component.

Unit Code	Unit Title	Assessment Methodologies
OIS-01	Safety Induction	Students will take a written test at the end of the Unit OIS-01 as a method of verifying that they have achieved all learning outcomes. The test will be "open book" and the questions must be clearly referenced in relation to the specific learning outcomes of the Unit in question.
OIS-78	Helicopter Safety and Escape CA-EBS	Assessment Guidance for Outcomes 1-3 Students will take a written test at the end of the Unit OIS-78 as a method of verifying that they have achieved all learning outcomes. The test will be "open book" and the questions must be clearly
		referenced in relation to the specific learning outcomes of the Unit in question.
		Assessment Guidance for Outcome 4-6 The practical evaluation of the training is carried out by carrying out the practical exercises, covering all the specific criteria. Students must successfully complete the practical exercises. The assessment method will be practical observation using the observation grid used to record the individual learning of each trainee. Note 1: CA-EBS equipment must not be worn during exercises 5.6 thru 5.10 Note 2: In addition to theoretical learning, demonstrations for HUET Exercises detailed in criteria 5.6 to 5.9, must be provided using video footage.
OIS-03	Sea Survival and First Aid	Assessment Guidance for Outcome 1 and 2 Students will take a written test at the end of the Unit OIS-03 as a method of verifying that they have achieved all learning outcomes. The test will be "open book" and the questions must be clearly referenced in relation to the specific learning outcomes of the Unit in question.
		Assessment Guidance for Outcome 3-5
		The practical evaluation of the training is carried out by carrying out the practical exercises, covering all the specific criteria.



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		Students must successfully complete the practical exercises. The assessment method will be practical observation using the observation grid used to record the individual learning of each trainee.
OIS-04	Firefighting and Self Rescue	Assessment Guidance for Outcomes 1 and 2 Students will take a written test at the end of the Unit OIS-04 as a method of verifying that they have achieved all learning outcomes. The test will be "open book" and the questions must be clearly referenced in relation to the specific learning outcomes of the Unit in question.
		Assessment Guidance for Outcomes 3 and 4 The practical evaluation of the training is carried out by carrying out the practical exercises, covering all the specific criteria. Students must successfully complete the practical exercises. The assessment method will be practical observation using the observation grid used to record the individual learning of each trainee.
		Learners must successfully complete all practical exercises in orderto achieve this Unit. (1) All practical sessions involving the use of the fire equipment must include the appropriate procedure on discovering a fire with
		emphasison raising the alarm. (2) The outcomes of this standard will be satisfied when each learner practices the operation and use of each of the following types of fire extinguisher:
		 (a) Water or foam (b) CO2 (c) Dry chemical (3) Although class A and B fuels must be used for demonstration firesby staff, simulation using LPG may be used for learner practical exercises.

Pedagogical resources / Spaces and equipment

Audiovisual and technical material to be made available in each action: room with adequate furniture; video projector; blackboard and others.



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Each learner will be given a Training Support Manual.

According to the needs detected at the level of specific resources to be used by the trainers, these will be requested by the same.

Equipment

The following equipment, of a type in use regionally on offshore oil and gas installations and helicopters involved in offshore operations, is required to meet the needs of the training programme.

- 1) Aviation and marine lifejackets
- 2) Cosmetic smoke generator
- 3) Sufficient Compressed Air Emergency Breathing System (CA-EBS) Equipment or life jackets/ transit suits with integrated CA-EBS.
- 4) 02
- 5) Method of charging compressed air cylinders
- 6) Fire blanket
- 7) First Aid Equipment
- 8) Fuels and props (Class A and B fires)
- 9) Helicopter rescue device (of a type used regionally offshore)
- 10) Helicopter Underwater Escape Trainer(s) c/w removable exits
- 11) Hose reel
- 12) Health and safety figures on accident statistics
- 13) Installation emergency organisation chart (examples)
- 14) Location aids suitable for training purposes (e.g. dummy radio beacons and pyrotechnics)
- 15) Mannequins and cleaning equipment
- 16) Marine liferaft and ancillary equipment
- 17) Permit to Work (examples)
- 18) Personal Protective Equipment (PPE)
- 19) Portable Extinguishers water/foam, CO2 and dry chemical
- 20) Rescue equipment
- 21) Aviation liferaft and ancillary equipment
- 22) Smoke hoods (plus a different type of smoke hood for demonstration purposes)
- 23) Products on task-based risk assessment, lifting and mechanical handling, PRfS, and Permit to Work
- 24) STOP/START/TOFS information
- 25) Marine survival suit (also known as immersion suit or abandonment suit). This suit is insulated.
- 26) An aviation transit suit: to include actual transit suits used in region/area for helicopter transfers
- 27) Pool training suits



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- 28) TEMPSC and ancillary equipment
- 29) One actual Tertiary Escape System and video/slide presentation of others
- 30) Torches
- 31) Video Pyrotechnics
- 32) Video Hypothermia
- 33) Winch for use during simulated helicopter rescue
- 34) Sufficient diving equipment for HUET safety divers
- 35) PLB Video where applicable

Target Group:

This training programme is designed to meet the initial offshore safety and emergency response training requirements for personnel new (or returning) to the offshore oil and gas industry who will be supplied with a compressed air emergency breathing system (CA-EBS) during offshore helicopter travel.

Total Training Duration: 20hrs35min

Validity: 4 years

Specific characteristics of training

a) Registration process

- <u>Place / time of the training</u> The training takes place at the CEDROS facilities in Palmela (Rua Vale de Craveiros CCI 8807 2950-731 Quinta do Anjo). Training will take place between 9:00 am and 6:00 pm, any changes will be communicated. The learner should consult his email, where he will receive confirmation of his registration and details of the training.
- <u>Prerequisites</u> The learner must consider the fulfillment of the prerequisites according to the training program of the course, when applicable.
- <u>Medical requirements</u> Trainings can be physically demanding, all participants who participate in this training must be able to participate fully. It is the trainee's responsibility to notify CEDROS if they have any medical condition or disability that we need to be aware of, for the safety of the learner and CEDROS.



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In the registration phase, learners must ensure that they send the medical certificate or declaration, before participating in the training:

- ✓ Valid and updated offshore medical certificate; or
- ✓ Medical certificate approved by the employer equivalent to the offshore medical certificate; or
- ✓ Medical screening by filling in a form provided by CEDROS and approved by Opito.

On the day of the training, learners have to fill in the medical declaration, before the start of the training, to self-assess their physical and mental health status and indicating they have read and understood a written statement regarding the physical and potentially stressful nature of the programme, and the need for learners to be in good health

- •<u>Photographic Record Identification Document</u> The learner must make sure that on the training day he / she brings with him a valid identification document (e.g.: citizen card, passport, etc.) to show the trainer at the beginning of the training and to do the recognition of the trainee.
- <u>Equipment</u> Most of the equipment used in the training is provided by CEDROS, however the learner must bring some Personal Protective Equipment, including safety boots, gloves and appropriate clothing. Other equipment can be considered in the confirmation email of the training action. If the learner does not have any equipment, he must communicate to CEDROS, in order to solve the situation.
- <u>Hygiene</u> The learner has changing rooms at his disposal, where he can change his clothes and have a bath. We recommend that you bring a change of clothes, slippers, towel and hygiene products.
- <u>Overnight / Meals</u> CEDROS has a partnership with local accommodation close to the training center (http://www.casadaspipas.pt/), where the trainee can stay (meals not included).

On the training day, CEDROS offers coffee breaks to the learners. Lunch is the trainee's responsibility, there are several local restaurants, on the day of the training more information will be given to the trainee's about the nearby restaurants.

b) Equal training opportunities

CEDROS is committed to provide all trainees with equal opportunity with regard to access to training, regardless of gender, nationality, ethnicity, religious belief, political affiliation, marital status, age or disability.



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The following clarifies some conditions for access to training, considering particular situations.

- **Disability** When a learner has some type of disability / physical limitation, he / she must inform CEDROS upon registration, so that we can provide the necessary support and follow-up during the training. However, there are courses in which some physical strength is required to carry out the practical component of the course, in which case the criteria must be analyzed and the effective possibility of compliance with the CEDROS technical team must be verified for health and safety reasons.
- Literacy learners who have difficulties in terms of language / literacy, must communicate to CEDROS at the time of registration, so that it verifies the possibility of guaranteeing, during the training, the support through the presence of a designated person which will assist in terms of reading and / or writing, during the training and in carrying out the evaluation process.
- Language / Language If the learner 's mother tongue is not the same as the one in which the training is given, they must have a minimum level of understanding and conversation to integrate the training.

We recommend that the trainee has a B1 level, according to the Common European Framework of Reference for Languages (Levels: A1 / A2 Basic User | B1 / B2 Independent User | C1 / C2 Advanced User).

Evaluation review process:

The learner's evaluation process can be revised whenever justified, it can occur at the trainee's request or if any non-conformity is detected.

The review of the trainee's evaluation process is carried out as follows: the evaluation test is reviewed by another OPITO trainer of the respective course, and there may be the need to repeat the practical component, through the reassessment of the exercises with another trainer.



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