

OFFSHORE COMPETENCY TRAINING PROGRAMME



**IADC Offshore
Competency Training Programme
Contents**

	PAGE
Preface.....	3
Programme Review History.....	5
Foreword	6
1. Introduction.....	7
2. European Training Matrix	12
3. IADC Course Information	22
4. IMO STCW Course Information.....	38
5. Training Criteria.....	58
6. Verification	71
7. IADC Training and Operations Passport.....	74
Appendix 1 - Abbreviations / Acronyms	77
Appendix 2 – Reciprocity Matrices.....	79
Appendix 3 – Course Lesson Schedules and Plans	82

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*<http://www.iadc.org/octp/index.html>

Preface

The IADC European Working Group at the request of the North Sea Offshore Authorities Forum (NSOAF), Training Workgroup, developed this new Offshore Competency Training Programme. Discussions between NSOAF and IADC created the environment to develop this programme.

The foundation of this programme is a common North West European standard for personal offshore competency. This will enable marine and rig crews to undertake specific courses, based on the training matrix, which are acceptable to all nations. Additionally, credit is given for marine and other personnel who have undertaken IMO STCW training. The ability to move freely across national borders, demonstrating the right degree of competency, is the aim of this programme.

The NSOAF envisages that this programme will contribute to greater efficiency and cost reduction both for industry and regulators, by reducing unnecessary duplication of effort. The NSOAF also expects that this programme will contribute to the enhancement of personal competency in health, safety and environment because of a more practical approach to training.

The contents of this handbook reflect the extensive co-operation and hard work of Drilling Contractors throughout Europe and globally as well as the efforts of IADC, the British, Danish and Norwegian Ship Owners Associations. Special thanks to:

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Programme Review History

REVISION	REVIEW HISTORY	DATE
001	First issue of draft concept with embryonic European Training Matrix together with BOSIET and HUET courses	May 2004
002	Draft updated based on comments received.	November 2004
003	Draft further enhanced with the addition of Training Criteria for BOSIET Course	June 2005
004	Draft updated based on comments received.	September 2005
005	Draft further revised.	October 2005
006	Major revision to reflect additional input from working group members and FOET course added. Training criteria for BOSIET, HUET and FOET courses added / modified.	May 2006
007	Updated Draft with definitions, expanded European Training Matrix, WellCap matrix, IMO Model Courses and IADC Fire Team Member Course information added	December 2006
008	Draft further revised to incorporate lessons learnt from trial course together with additional definitions, revision history, reciprocity matrices and course lesson plans	April 2007
009	Temporary suspension of IMO STCW Exemptions, highlighted content and globalisation of document	October 2007
010	Change BIOS/FIOS Learning Target 3 to specify no more than 3m height; revised maximum and group size numbers in Lesson Schedules for BIOS, FIOS and HUET courses.	February 2009

Foreword

The programme handbook consists of seven chapters with a number of appendices to enable readers to navigate easily to specific areas of interest.

Chapter 1. Introduction - discusses general matters such as the background, objective, definitions, accreditation, certification, medical requirements.

Chapter 2. Training Matrix - provides a schematic overview of the main characteristics of the programme, namely the course requirements for each crew function, detailing acceptable alternative IMO STCW courses where appropriate.

Chapter 3. IADC Course Information - provides detailed description of each individual course syllabus, admission requirements, duration and period of validity.

Chapter 4. IMO STCW Course Information - provides a description of each relevant course.

Chapter 5. Training Criteria - outlines the methods for demonstrating competence and the criteria for evaluating competence.

Chapter 6. Verification - an overview of the actions necessary to provide sufficient confidence that training establishments and courses meet the criteria detailed in Chapter 5.

Chapter 7. IADC Training Passport – describes the methodology for controlling and verification of individual skills and knowledge, including medical suitability.

Appendix 1. Abbreviations/Acronyms

Appendix 2. Reciprocity Matrices

Appendix 3. Course Lesson Plans

1. Introduction

BACKGROUND:

Working on any Mobile Offshore Unit requires specific skills, training and competency to ensure that daily operations and response to emergency situations can be undertaken safely and professionally.

This is achieved by having crews with the right competencies, incorporating education, training and experience to undertake the tasks expected of them. The IADC Offshore Competency Training Programme addresses the training element of the core competency necessary for individuals to work on Mobile Offshore Units (MOU's). The nature and quality of the training received must be of such a standard that personnel can be counted on completely to fulfil their tasks.

Training for offshore crew members will be supplemented by Company specific induction and training, mobile offshore unit specific induction, task specific induction and training, offshore drills and exercises as well as computer based training as appropriate. Certain specialist courses may also require periodic simulator based training onshore to enhance the degree of competency to deal with foreseeable scenarios.

OBJECTIVE:

The objective of this programme handbook is to define the training course requirements necessary for personnel working on MOU's.

Additionally the handbook outlines a number of optional courses to address the specific needs of individual companies.

Finally to identify the means by which competency can be assured.

TERMS AND DEFINITIONS:

For the purpose of this programme, the terms used have the meanings defined below:

1. **Mobile Offshore Unit (MOU):** means a vessel(s) which can be readily relocated and which can perform an industrial function involving offshore operations other than those traditionally provided by vessels covered by chapter 1 of the 1974 SOLAS Convention. Such MOU's include at least the following:
 - a. **Column-stabilized unit:** is a unit with the main deck connected to the underwater hull or footings by columns or caissons, commonly known as a semi-submersible;
 - b. **Non-self propelled unit:** is a unit not certified to navigate independently;
 - c. **Self-elevating unit:** is a unit with moveable legs capable of raising its hull above the surface of the sea, commonly known as a Jack-up;
 - d. **Self-propelled unit:** is a unit certified to navigate independently;
 - e. **Submersible unit:** is a unit with a ship shape, barge-type or novel hull design (other than self-elevating unit) intended for operation while bottom bearing;
 - f. **Surface unit:** is a unit with a ship or barge-type displacement hull of single or multiple-hull configuration intended for operation in the floating condition.

2. **Mobile Offshore Drilling Unit (MODU):** is a unit capable of engaging in drilling operations for the exploration for, or exploitation of, resources beneath the seabed such as liquid or gaseous hydrocarbons, sulphur or salt.
3. **Drillship:** is a self-propelled ship-shape monohull surface mobile offshore drilling unit.
- 4.
5. **Mobile Offshore Accommodation Unit:** is a unit the primary purpose of which is to accommodate personnel offshore;
6. **Other Mobile Offshore Units:** are units that may be involved in any single activity or combination of activities such as:
 - a. Construction;
 - b. Maintenance (including the maintenance of wells);
 - c. Lifting operations;
 - d. Pipe laying and related operations;
 - e. Emergency / contingency preparedness, including fire fighting;
 - f. Offshore production systems;
 - g. Diving.

Mobile offshore units do not include vessels such as:

- a. Supply vessels;
 - b. Standby vessels;
 - c. Anchor handling vessels;
 - d. Seismic vessels;
 - e. Ship-shape monohull diving support vessels.
7. **Maritime Safety Training:** means training with respect to safety of life at sea, including personal and group survival;
 8. **Emergency Preparedness Training:** means training which prepares individuals to respond adequately and safely to anticipated emergency situations;
 9. **Offshore Installation Manager:** means a competent person appointed in writing by the owner as the Person In Charge, who has complete and ultimate command of the unit and to whom all personnel on board are responsible;
 10. **Barge Supervisor:** means a person who may provide support to the OIM in certain essential marine matters. The Barge Supervisor on some MOU's may be referred to as the Stability Section Leader or Barge Master;
 11. **Ballast Control Operator:** means the person assigned responsibility for the normal day-to-day control of trim, draught and stability;
 12. **Maintenance Supervisor:** means the person assigned responsibility for the inspection, operation and testing, as required, of all machinery and equipment as specified by the owner of the MOU. The Maintenance Supervisor on some MOU's may also be referred to as the Chief Engineer, Technical Section Leader or Rig Mechanic;
 13. **Maritime Crew:** comprises the OIM, Barge Supervisor, Ballast Control Operator and Maintenance Supervisor as well as other Deck and Engineer Officers, Radio

Operators and ratings defined in regulation I/1 of STCW Convention, as amended.

14. **Standard of Competence:** means the level of proficiency to be achieved for the proper performance of functions on board the MOU in accordance with the criteria as set forth herein and incorporating prescribed standards or levels of knowledge, understanding and demonstrated skill.
15. **Evaluation Criteria:** are the entries appearing in column 4 of the "Specifications of Minimum Standards of Competence" tables in Chapter 5 – Training Criteria and provide the means for an assessor to judge whether or not a candidate can perform the related tasks, duties and responsibilities.
16. **Independent Evaluation:** means an evaluation by suitably qualified persons, independent of, or external to, the unit or activity being evaluated, to verify that the administrative and operational procedures at all levels are managed, organized, undertaken and monitored internally in order to ensure their fitness for purpose and achievement of stated objectives.
17. **Very Important Person (VIP):** is a person who is accorded special privileges due to their status or importance (e.g. Member of a Royal Family / Household, President / Head of State, Prime Minister, Minister of State, Company Chairman).

ACCREDITATION AND QUALITY ASSURANCE:

Only training schools, establishments, companies and organisations accredited by IADC will be able to offer courses based on the IADC Offshore Competency Training Programme. Chapter 6 details the process by which IADC will verify the suitability of such organisations to undertake courses detailed in this programme. To ensure the quality and consistency of training courses undertaken by accredited Training Establishments based on this programme, IADC will audit such facilities periodically by its Accreditation and Certification group. Where audits of such establishments are undertaken by others on behalf of a national oil industry association, IADC will liaise with the appropriate national association to avoid duplication of effort.

TRAINING ESTABLISHMENT REQUIREMENTS:

All accredited Training Establishments must have and implement a quality assurance system based on the latest editions of relevant ISO standards. The facilities available at an accredited Training Establishment shall be suitable and sufficient to carry out those IADC training courses that it has been accredited to undertake.

In terms of suitable and sufficient, the theoretical elements of courses detailed in this programme must be conducted in classrooms of a size capable of accommodating the maximum number of participants in an ergonomically acceptable environment. Likewise, those course elements of a practical nature must be conducted in facilities that enable the safe and effective performance of the tasks required. Accredited Training Establishments must also provide sufficient facilities for rest breaks, meals and refreshments during courses. They must also provide personal hygiene arrangements

and changing facilities for both male and female course participants including means to store safely and securely their personal belongings.

Each accredited Training Establishment shall provide all participants with sufficient documentation / handbook / handouts containing reference information relevant to the course undertaken. Such documentation must be in hard copy format and whenever possible in digital format.

TRAINING ESTABLISHMENT STAFF:

Each Training Establishment must have sufficient competent staff to effectively undertake all aspects of those courses that it has been accredited to undertake. Such staff must be provided with teaching aids, training models, equipment and the means necessary to effectively and safely impart the required knowledge, understanding and proficiency required by the learning targets for each course detailed in this programme.

CERTIFICATION / IADC TRAINING AND OPERATIONS PASSPORT:

It is a requirement that at the end of each course the participant must attain a certain level of knowledge, understanding and proficiency. The manner in which this is evaluated, may be different for each course, details can be found in chapter 5. Each participant will only receive a certificate and certified entry in the IADC Training and Operations Passport (see chapter 7) if the requirements established in the course are met (a responsibility of the accredited training establishment). All certificates issued by accredited training establishments for courses detailed within this programme shall bear a unique number. This number will incorporate an IADC prefix followed by the unique number perforated on each participants Training and Operations Passport.

Certification validity is defined within each specific course description and the expiry date will be clearly indicated on an individual's course certificate and in the IADC Training and Operations Passport. Refresher courses should be undertaken 3 months prior to the expiry date of the current certificate. Refresher certificates / entries in the IADC Operations and Training Passport will have extended validity based on the expiry date from the previous course.

MEDICAL EXAMINATION AND CERTIFICATION REQUIREMENTS:

The health assessment, personal examination and valid certification of individuals travelling to or working on a Mobile Offshore Unit are pre-requisites before being allowed to embark onto a vessel, unit or helicopter. This assessment, examination and consequent certification of their medical fitness to work offshore is also a pre-requisite before they can register to attend any of the courses detailed within this programme. Personnel assigned specialist duties, including emergency response team membership, will require additional medical evaluation to ensure that they are both medically and physically capable of performing their assigned job functions.

All personnel must be examined prior to employment and thereafter at a maximum two year interval. A shorter duration may be deemed necessary by the examining physician for personnel in high risk medical categories and those having specialist duties.

EXEMPTIONS:

Visitors and VIP's travelling to MOU's and spending less than 24 hours continuously on the MOU, whilst under the direct supervision of competent offshore personnel, can be exempted from training. However, such visitors and VIP's must participate in an offshore induction programme on arrival at the MOU.

Any crew member, who possesses current / valid IMO STCW certificates as detailed in the Training Matrix in Chapter 2, may be exempt from the requirement to undertake a specific course or course module(s).

2. Training Matrix

INTRODUCTION:

The training matrix detailed on the following pages, provides an overview of the scope and flexibility of this programme.

The top left row of each matrix details specific courses covered by the programme, which are either mandatory or discretionary for specific crew functions. Underneath this is a listing of IMO STCW courses which if taken together provide an equivalent level of competency to those detailed in the corresponding course above

The Crew Function column on the right of each matrix page provides an overview of all functions found on MOU's. Some functions are generic and are found in all companies, these are coloured blue. However, many functions have commonly used alternative titles, highlighted by asterisks.

A tabulated list of alternative titles is detailed on page 18 of this programme.

Across the bottom of each page is a list of additional modules required by specific countries to compliment the main courses. *(Currently the only additional modules identified cover Norwegian legislation and familiarization with the Norwegian integrated survival suit. These modules will be addressed in company specific induction courses for personnel working on the Norwegian continental shelf)*

Training Matrix

Part 1

Applicable Countries	All	All	All	All	
IADC Training Courses	Offshore Medical 1.0	Basic Introduction to Offshore Safety (BIOS) 1.1	(HUET) Helicopter Underwater Escape Training including Air pocket re-breather 2.1	Further Introduction to Offshore Safety (FIOS) 2.2	Crew Function
Alternative Acceptable IMO STCW Courses (Temporarily Suspended)	No.	<i>IMO STCW Course</i>			
	1.13	Elementary First Aid+			
	1.19	Personal Survival Techniques +			
	1.20	Fire Prevention & Fire Fighting+			
	1.21	Personal Safety			
		(All courses must be taken*see page 22)			
	⬇	⬇	⬇	⬇	Drilling Superintendent
	⬇	⬇	⬇	⬇	OIM *
	⬇	⬇	⬇	⬇	Rig Manager *
	⬇	⬇	⬇	⬇	Assistant Rig Manager *
	⬇	⬇	⬇	⬇	Driller
	⬇	⬇	⬇	⬇	Assistant Driller
	⬇	⬇	⬇	⬇	Derrickman
	⬇	⬇	⬇	⬇	Assistant Derrickman *
	⬇	⬇	⬇	⬇	Floorman *
	⬇	⬇	⬇	⬇	Crane Operator
	⬇	⬇	⬇	⬇	Assistant Crane Operator *
	⬇	⬇	⬇	⬇	Lead Roustabout *
	⬇	⬇	⬇	⬇	Roustabout
	⬇	⬇	⬇	⬇	Green Roustabout
	⬇	⬇	⬇	⬇	Painter
	⬇	⬇	⬇	⬇	Maintenance Supervisor
	⬇	⬇	⬇	⬇	Chief Mechanic *
	⬇	⬇	⬇	⬇	Assistant Mechanic *
	⬇	⬇	⬇	⬇	Motorman
	⬇	⬇	⬇	⬇	Chief Electrician *
	⬇	⬇	⬇	⬇	Assistant Electrician *
	⬇	⬇	⬇	⬇	Technical Manager *
	⬇	⬇	⬇	⬇	Technical Assistant *
	⬇	⬇	⬇	⬇	Control Room Operator
	⬇	⬇	⬇	⬇	Barge Engineer *
	⬇	⬇	⬇	⬇	Engine Room Operator *
	⬇	⬇	⬇	⬇	Welder
	⬇	⬇	⬇	⬇	Medic
	⬇	⬇	⬇	⬇	Sub Sea Engineer
	⬇	⬇	⬇	⬇	Assistant Sub Sea Engineer *
	⬇	⬇	⬇	⬇	Electronics Technician *
	⬇	⬇	⬇	⬇	Materials man *
	⬇	⬇	⬇	⬇	Trainee Materials man *
	⬇	⬇	⬇	⬇	Ram Rig Technician
	⬇	⬇	⬇	⬇	Radio Operator
	⬇	⬇	⬇	⬇	Safety Training Specialist (STS) *
	⬇	⬇	⬇	⬇	Trainee Safety Training Specialist (STS) *
	⬇	⬇	⬇	⬇	Catering Manager *
	⬇	⬇	⬇	⬇	Cook
	⬇	⬇	⬇	⬇	Catering Assistant *
					* see matrix of alternatives on page 21 Name used across Drilling Industry
Country Specific Additions		Norwegian Legislation and familiarization with integrated survival suit			

⬇	Mandatory Course
⬇	Discretionary Course

Training Matrix

Part 2

Applicable Countries	All Fire Team Member 3.1	All Fire Team Leader 3.2	All Helideck Fire Team 3.3	Crew Function
IADC Training Courses				
Alternative Acceptable IMO STCW Courses				
				Drilling Superintendent
				OIM *
				Rig Manager *
				Assistant Rig Manager *
				Driller
				Assistant Driller
				Derrickman
				Assistant Derrickman *
				Floorman *
				Crane Operator
				Assistant Crane Operator *
				Lead Roustabout *
				Roustabout
				Green Roustabout
				Painter
				Maintenance Supervisor
				Chief Mechanic *
				Assistant Mechanic *
				Motorman
				Chief Electrician *
				Assistant Electrician *
				Technical Manager *
				Technical Assistant *
				Control Room Operator
				Barge Engineer *
				Engine Room Operator *
				Welder
				Medic
				Sub Sea Engineer
				Assistant Sub Sea Engineer *
				Electronics Technician *
				Materials man *
				Trainee Materials man *
				Ram Rig Technician
				Radio Operator
				Safety Training Specialist (STS) *
				Trainee Safety Training Specialist (STS) *
				Catering Manager *
				Cook
				Catering Assistant *
				* see matrix of alternatives on page 21
				Name used across Drilling Industry
Country Specific Additions				

●	Mandatory Course
●	Discretionary Course

Training Matrix

Part 3

Applicable Countries	All	All	All	
IADC Training Courses	Man Overboard Boat / Fast Rescue Craft 3.4	Coxswain 3.5		Crew Function
Alternative Acceptable IMO STCW Courses				
				Drilling Superintendent
				OIM *
				Rig Manager *
				Assistant Rig Manager *
				Driller
				Assistant Driller
				Derrickman
				Assistant Derrickman *
				Floorman *
				Crane Operator
				Assistant Crane Operator *
				Lead Roustabout *
				Roustabout
				Green Roustabout
				Painter
				Maintenance Supervisor
				Chief Mechanic *
				Assistant Mechanic *
				Motorman
				Chief Electrician *
				Assistant Electrician *
				Technical Manager *
				Technical Assistant *
				Control Room Operator
				Barge Engineer *
				Engine Room Operator *
				Welder
				Medic
				Sub Sea Engineer
				Assistant Sub Sea Engineer *
				Electronics Technician *
				Materials man *
				Trainee Materials man *
				Ram Rig Technician
				Radio Operator
				Safety Training Specialist (STS) *
				Trainee Safety Training Specialist (STS) *
				Catering Manager *
				Cook
				Catering Assistant *
				<i>* see matrix of alternatives on page 21</i>
				<i>Name used across Drilling Industry</i>
Country Specific Additions				

●	Mandatory Course
●	Discretionary Course

Training Matrix

Part 4

Applicable Countries	All	All	All	
IADC Training Courses	Helicopter Landing Officer 4.1	First Aid Team 4.2	Rig Medic 4.3	Crew Function
Alternative Acceptable IMO STCW Courses				Drilling Superintendent
				OIM *
				Rig Manager *
				Assistant Rig Manager *
				Driller
				Assistant Driller
				Derrickman
				Assistant Derrickman *
				Floorman *
				Crane Operator
				Assistant Crane Operator *
				Lead Roustabout *
				Roustabout
				Green Roustabout
				Painter
				Maintenance Supervisor
				Chief Mechanic *
				Assistant Mechanic *
				Motorman
				Chief Electrician *
				Assistant Electrician *
				Technical Manager *
				Technical Assistant *
				Control Room Operator
				Barge Engineer *
				Engine Room Operator *
				Welder
			●	Medic
				Sub Sea Engineer
				Assistant Sub Sea Engineer *
				Electronics Technician *
				Materials man *
				Trainee Materials man *
			Ram Rig Technician	
			Radio Operator	
			Safety Training Specialist (STS) *	
			Trainee Safety Training Specialist (STS) *	
			Catering Manager *	
			Cook	
			Catering Assistant *	
			* see matrix of alternatives on page 21 Name used across Drilling Industry	
Country Specific Additions				

●	Mandatory Course
●	Discretionary Course

Training Matrix

Part 5

Applicable Countries	All		All	
IADC Training Courses	Radio Operator 4.4		Dangerous Goods 4.5	Crew Function
Alternative Acceptable IMO STCW Courses	No.	IMO STCW Course		
	1.25	General Operators Certificate for the Global Maritime Distress and Safety System		
				Drilling Superintendent
				OIM *
				Rig Manager *
				Assistant Rig Manager *
				Driller
				Assistant Driller
				Derrickman
				Assistant Derrickman *
				Floorman *
				Crane Operator
				Assistant Crane Operator *
				Lead Roustabout *
				Roustabout
				Green Roustabout
				Painter
				Maintenance Supervisor
				Chief Mechanic *
				Assistant Mechanic *
				Motorman
				Chief Electrician *
				Assistant Electrician *
				Technical Manager *
				Technical Assistant *
				Control Room Operator
				Barge Engineer *
				Engine Room Operator *
				Welder
				Medic
				Sub Sea Engineer
				Assistant Sub Sea Engineer *
				Electronics Technician *
				Materials man *
				Trainee Materials man *
				Ram Rig Technician
				Radio Operator
				Safety Training Specialist (STS) *
				Trainee Safety Training Specialist (STS) *
				Catering Manager *
				Cook
				Catering Assistant *
				* see matrix of alternatives on page 21
				Name used across Drilling Industry
Country Specific Additions				

●	Mandatory Course
●	Discretionary Course

Training Matrix

Part 6

Applicable Countries IADC Training Courses	All	All	All	
				Crew Function
Alternative Acceptable IMO STCW Courses				Drilling Superintendent
				OIM *
				Rig Manager *
				Assistant Rig Manager *
				Driller
				Assistant Driller
				Derrickman
				Assistant Derrickman *
				Floorman *
				Crane Operator
				Assistant Crane Operator *
				Lead Roustabout *
				Roustabout
				Green Roustabout
				Painter
				Maintenance Supervisor
				Chief Mechanic *
				Assistant Mechanic *
				Motorman
				Chief Electrician *
				Assistant Electrician *
				Technical Manager *
				Technical Assistant *
				Control Room Operator
				Barge Engineer *
				Engine Room Operator *
				Welder
				Medic
				Sub Sea Engineer
				Assistant Sub Sea Engineer *
				Electronics Technician *
				Materials man *
				Trainee Materials man *
			Ram Rig Technician	
			Radio Operator	
			Safety Training Specialist (STS) *	
			Trainee Safety Training Specialist (STS) *	
			Catering Manager *	
			Cook	
			Catering Assistant *	
			<i>* see matrix of alternatives on page 21</i>	
			<i>Name used across Drilling Industry</i>	
Country Specific Additions				

●	Mandatory Course
●	Discretionary Course

Well Control Training Matrix

Crew Function	Drilling Superintendent	OIM	Rig Manager	Assistant Rig Manager	Driller	Assistant Driller	Derrickman	Assistant Derrickman	Floorman
Alternative Function Title		<i>Platform Manager Person in Charge</i>	<i>Senior Toolpusher Toolpusher Drilling Supervisor</i>	<i>Junior Toolpusher Night Rig Manager TourPusher</i>				<i>Lead Floorman Pumpman</i>	<i>Roughneck Floorhand</i>
WellCap Course / Level									
WellCap Plus	▲	▲	▲	▲	▲				
WellCap - Drilling									
Supervisor	▲	▲	▲	▲	▲				
Fundamental					▲	▲	▲		
Introductory*							▲	▲	▲
WellCap - Workover									
Supervisor	▲	▲	▲	▲	▲				
Fundamental					▲	▲	▲		
WellCap - Wireline									
Supervisor	▲	▲	▲	▲	▲				
Fundamental	▲	▲	▲	▲	▲	▲	▲		
WellCap – Coiled Tubing									
Supervisor	▲	▲	▲	▲	▲				
Fundamental	▲	▲	▲	▲	▲	▲	▲		
WellCap – Snubbing									
Supervisor	▲	▲	▲	▲	▲				
Fundamental	▲	▲	▲	▲	▲	▲	▲		
WellCap – Underbalanced Operations									
Supervisor	▲	▲	▲	▲	▲				
WellCap – Well Servicing									
Introductory**								▲	▲

▲

 Mandatory

▲

 Discretionary

Introductory* Includes – Drilling, Workover & Completion

Introductory** Includes – Wireline, Coiled Tubing & Snubbing

Alternative Crew Function Titles

Crew Function	Alternative Job Title	Alternative Job Title	Alternative Job Title	Alternative Job Title	Alternative Job Title
Drilling Superintendent					
OIM *	Platform Manager				
Rig Manager *	Senior Toolpusher	Toolpusher	Drilling Supervisor	Rig Superintendent	
Assistant Rig Manager *	Junior Toolpusher	Night Rig Manager	Tour Pusher	Asst. Rig Superintendent	
Driller					
Assistant Driller					
Derrickman					
Assistant Derrickman *	Lead Floorman	Pumpman			
Floorman *	Roughneck	Floorhand			
Crane Operator					
Assistant Crane Operator *	Trainee Crane Operator				
Lead Roustabout *	Roustabout Pusher				
Roustabout					
Green Roustabout					
Painter					
Maintenance Supervisor					
Chief Mechanic *	Day Mechanic	Supervisory Mechanic	Senior Mechanic		
Assistant Mechanic *	Mechanic	Night Mechanic	Trainee Mechanic		
Motorman					
Chief Electrician *	Day Electrician	Supervisory Electrician	Senior Electrician		
Assistant Electrician *	Electrician	Night Electrician	Trainee Electrician		
Technical Manager *	Chief Engineer				
Technical Assistant *	First Engineer	Second Engineer	Rig Engineer	Assistant Rig Engineer	
Control Room Operator					
Barge Engineer *	Stability Manager				
Engine Room Operator					
Welder					
Medic					
Sub Sea Engineer					
Assistant Sub Sea Engineer *	Trainee Sub Sea Engineer				
Electronics Technician					
Materials man *	Materials Co-ordinator	Logistics	Storeman		
Trainee Materials man *	Night Materials Man	Assistant Materials Man	Assistant Logistics		
Ram Rig Technician					
Radio Operator					
Safety Training Specialist (STS) *	HSE&T Officer	HSE Advisor	Offshore Safety Advisor		
Trainee Safety Training Specialist (STS)	Assistant Safety Training				
Catering Manager *	Camp Boss				
Cook					
Catering Assistant *	Assistant Cook	Night Cook			

The Matrix identifies those courses that are mandatory and discretionary for personnel working on Mobile Offshore Units. All personnel require an offshore medical and the need to have undertaken a Basic Introduction to Offshore Safety (BIOS) Course or the Further Introduction to Offshore Safety (FIOS) refresher course as detailed in Chapter 3. All personnel working offshore also need to undertake the Helicopter Underwater escape Training (HUET) Course. However, any crew member who possesses current / valid IMO STCW certificates for all of the following will be exempt from the requirement to undertake a BIOS Course:

IMO STCW course 1.13 Elementary First Aid;
IMO STCW course 1.19 Personal Survival Techniques;
IMO STCW course 1.20 Fire Prevention and Fire Fighting
IMO STCW course 1.21 Personal Safety

SPECIAL NOTE*

Crew members possessing all of the above IMO STCW Certificates will be required to attend an installation / location specific induction course to familiarize themselves with their new working environment, its operations, activities and all applicable controls, standards and procedures in place, including the following:

1. Introduction to the Offshore Oil and Gas Industry;
2. Individual responsibility for safety;
3. Reporting incidents;
4. Location, type, use and availability of installed life saving appliances including TEMPSC's;
5. Local exercises, drills and muster station location;
6. Personal protective equipment

3. IADC Course Information

INTRODUCTION:

This chapter provides a detailed description of each course in the IADC Offshore Competency Programme.

It starts with the primary course for each topic group followed by its corresponding refresher, where appropriate. Each course, including refreshers, is given a unique number for ease of identification.

There are five main topic groups, namely:

1. Basic Safety & Emergency Response Training;
2. Additional Safety & Emergency Response Training;
3. Specialist Emergency Response Training;
4. Functional Training;
5. Optional Training.

The description of each course is structured to provide the reader with:

- a. a clear objective, summarising its intent;
- b. the learning targets for the course;
- c. the duration (contact hours) for the course;
- d. the manner in which the skills and knowledge acquired by each participant are assessed;
- e. the validity of the course and when and what type of refresher is necessary to maintain the required skill level;
- f. the acceptability of alternative training courses which will provide an exemption from undertaking the course.

No.	COURSE DESCRIPTION
1.	Basic Safety & Emergency Response Training
1.1	Basic Introduction to Offshore Safety (BIOS)
2.	Additional Safety & Emergency Response Training
2.1	Helicopter Underwater Escape Training incl. air pocket re-breather
2.2	Further Introduction to Offshore Safety (FIOS) (<i>BIOS refresher</i>)
3.	Specialist Emergency Response Training
3.1	Fire Team Member
3.1a	Fire Team Member Refresher
3.2	Fire Team Leader / On Scene Commander
3.2a	Fire Team Leader / On Scene Commander Refresher
3.3	Helideck Fire Team
3.4	Man Overboard Boat / Fast Rescue Craft
3.5	Coxswain
4.	Function Training
4.1	Helicopter Landing Officer (including Dangerous Goods transport)
4.2	First Aid Team
4.3	Rig Medic
4.4	Radio Operator
4.5	Dangerous Goods (transport and handling)
4.6	Lifting and Slinging
5.	Optional Training
5.1	Safety Leadership Training
5.2	Well Control Training
5.3	H ₂ S Basic
5.4	Ballast Control & Stability Training

Basic Introduction to Offshore Safety

- COURSE N^o:** 1.1 - BASIC INTRODUCTION TO OFFSHORE SAFETY (BIOS)
- COURSE TYPE:** Basic Safety & Emergency Response Training
- INTENDED FOR:** All personnel on or travelling to a Mobile Offshore Unit (MOU) (see exemptions below). The course is designed to meet the initial onshore safety training and assessment requirements for personnel new to the offshore oil and gas industry and destined to work on and or travel to MOU's.
- OBJECTIVE:** To gain a basic level of understanding and awareness of safety and emergency response on Mobile Offshore Units (MOU's).
- LEARNING TARGETS:**
- Safety & Security Introduction:**
 - a. brief introduction to offshore;
 - b. general safety and security measures, controls and procedures;
 - c. individual responsibility for safety;
 - d. protective measures;
 - e. reporting incidents;
 - f. introduction to first aid.

 - Helicopter Operations: (Not HUET)**
 - a. pre-boarding preparation;
 - b. in flight safety;
 - c. arrival procedure.

 - Survival at Sea Techniques:**
 - a. personal safety, survival and rescue equipment;
 - b. muster and evacuation points & procedures;
 - c. use of emergency escape equipment;
 - d. individual & group survival & rescue techniques;
 - e. rescue by support vessels & helicopters;
 - f. offshore drills, exercises & emergency procedures;

 - Basic Fire Fighting and Self Rescue:**
 - a. causes and nature of fires & principles of prevention;
 - b. purpose of fixed detection & protection systems;
 - c. actions to take on discovering a fire;
 - d. operation of portable fire fighting equipment;
 - e. location, use and response to alarms;

Basic Introduction to Offshore Safety

- DURATION:** 2 days
- ASSESSMENT:** A written or oral assessment of the theoretical knowledge gained, with a final assessment by the instructor of all practical exercises. A pass will result in a Training Certificate being issued and a certified record entered in the individuals IADC Training and Operations Passport.
- VALIDITY:** The course has four year validity. Personnel should undertake a refresher course before expiry of their current certificate.
- EXEMPTIONS:** Personnel in possession of all the following IMO STCW Course Certificates with current validity (*refer to page 22, for installation / location specific induction requirements*):
- 1.13 – Elementary First Aid;
 - 1.19 – Personal Survival Techniques;
 - 1.2 – Fire prevention and Fire Fighting;
 - 1.21 – Personal Safety with current validity.

VIP's travelling to MOU's and spending less than 24 hours continuously on the MOU, whilst under the direct supervision of competent offshore personnel. Such VIP's must participate in an offshore induction programme on arrival at the MOU.

Helicopter Underwater Escape Training (HUET)

COURSE N^o: 2.1 – HELICOPTER UNDERWATER ESCAPE TRAINING (HUET)

COURSE TYPE: Additional Safety and Emergency Response Training

INTENDED FOR: All personnel on or travelling to a MOU. The course is designed to meet the emergency response training requirements for all personnel travelling offshore.

OBJECTIVE: To gain the required level of understanding and awareness of emergency response to helicopter emergencies that may occur during boarding, travelling to and from Mobile Offshore Units and disembarking.

**LEARNING
TARGETS:**

Helicopter Safety:

- a. necessity for regular helicopter safety briefings;
- b. awareness of helicopter escape routes;
- c. exit points and their operations;
- d. adherence to aircrew flight safety instructions;
- e. response to aircrew notification of an immediate emergency;
- f. familiarization with helicopter safety and emergency procedures in various flight stages including landing and ditching procedures;
- g. actions to take in response to in-flight incidents as a contribution to flight safety;

Personal Survival Equipment:

- a. donning a survival suit, emergency breathing system equipment and an aviation lifejacket;
- b. the principles of emergency breathing system equipment using compressed air;
- c. the durations of re-breathing personal and compressed air systems;
- d. verifying the integrity of the emergency breathing system equipment;
- e. flotation dynamics associated with emergency breathing systems and equipment;

Helicopter Emergency Equipment:

- a. awareness of emergency equipment onboard;
- b. awareness of response to alarms and in-flight emergency communications;
- c. aircraft flotation characteristics;

Response to an Emergency:

- a. response to aircrew instructions;
- b. personal equipment checks;
- c. brace position;
- d. location and operation of exit mechanism;

Helicopter Underwater Escape Training (HUET)

- e. awareness of hazards associated with controlled emergency landing or ditching.

Survival at Sea:

- a. correct procedure / technique for helicopter surface evacuation;
- b. correct procedure / technique for escaping from a partially submerged or capsized helicopter;
- c. correct use of helicopter life raft and personal equipment;
- d. group and individual survival techniques

DURATION: 1 day

ASSESSMENT: A written or oral assessment of the theoretical knowledge gained, with a final assessment by the instructor of all practical exercises. A pass will result in a Training Certificate being issued and a certified record entered in the individuals IADC Training and Operations Passport.

VALIDITY: The course has four year validity. Personnel should undertake a refresher course before expiry of their current certificate.

EXEMPTION: VIP's travelling to MOU's and spending less than 24 hours continuously on the MOU. Such VIP's must participate in an onshore induction programme prior to departure by helicopter.

Further Introduction to Offshore Safety (FIOS)

COURSE N^o: 2.2 - FURTHER INTRODUCTION TO OFFSHORE SAFETY (FIOS)

COURSE TYPE: Additional Safety and Emergency Response Training

INTENDED FOR: All personnel performing activities on a Mobile Offshore Unit (MOU).

OBJECTIVE: The course is designed for personnel to maintain a minimum level of competence and understanding of the conditions and hazards associated with working offshore on MOU's.

**LEARNING
TARGETS:**

Safety & Security Introduction ~ refresher of:

- a. brief introduction to offshore;
- b. general safety and security measures, controls and procedures;
- c. individual responsibility for safety;
- d. protective measures;
- e. reporting incidents;
- f. introduction to first aid.

Helicopter Operations (including HUET) ~ refresher of:

- a. pre-boarding preparation, in flight safety and arrival procedure;
- b. use of personal protective equipment;
- c. operation and use of emergency breathing system;
- d. actions in preparation for and following helicopter ditching in water, partial submersion and capsized.

Survival at Sea Techniques ~ short refresher of:

- a. personal safety, survival and rescue equipment;
- b. muster and evacuation points & procedures;
- c. use of emergency escape equipment;
- d. individual & group survival & rescue techniques;
- e. rescue by support vessels & helicopters;
- f. offshore drills, exercises & emergency procedures;

Basic Fire Fighting and Self Rescue ~ short refresher of:

- a. causes and nature of fires & principles of prevention;
- b. purpose of fixed detection & protection systems;
- c. actions to take on discovering a fire;
- d. operation of portable fire fighting equipment;
- e. location, use and response to alarms;

DURATION: 2 days of which 1 day is for HUET

ASSESSMENT: A written or oral assessment of the theoretical knowledge gained, with a final assessment by the instructor of all practical exercises.

Further Introduction to Offshore Safety (FIOS)

A pass will result in a Training Certificate being issued and a certified record entered in the individuals IADC Training and Operations Passport.

VALIDITY: The course has four year validity. Personnel should undertake a refresher course before expiry of their current certificate.

EXEMPTIONS: VIP's travelling to MOU's and spending less than 24 hours continuously on the MOU, whilst under the direct supervision of competent offshore personnel. Such VIP's must participate in an onshore briefing at the heliport prior to departure and an offshore induction programme on arrival at the MOU.

Fire Fighting & Rescue Team Member

COURSE N^o: 3.1 – FIRE FIGHTING AND RESCUE TEAM MEMBER

COURSE TYPE: Specialist Emergency Response Training

INTENDED FOR: All members of the fire fighting and rescue team on a Mobile Offshore Unit (MOU). Participants must be in possession of a valid medical and BIOS or FIOS certificate.

OBJECTIVE: The course is designed for personnel assigned to the fire fighting and rescue team. Its aim is to provide them with the theory and practice of fire fighting, fire control and extinguishment as well as search and rescue activities on MOU's.

**LEARNING
TARGETS:**

Roles and Responsibilities:

- a. The role of the team during emergencies;
- b. Teamwork and response to alarms;
- c. Planning and implementing fire fighting measures;
- d. Conducting Search and Rescue operations.

Rescue Techniques:

- a. Search and Rescue Techniques;
- b. Closed containers and confined spaces;
- c. Elementary First Aid;
- d. Maintain effective communications;
- e. Casualty handling;
- f. Chemical incidents including decontamination procedures.

Fire Fighting & Prevention:

- a. Fire fighting theory;
- b. Extinguishers, extinguishing agents and hose reels;
- c. Fixed protection, detection and alarm systems;
- d. Foam equipment;
- e. Gas fire characteristics;
- f. Hose handling / water protection;
- g. Breathing apparatus techniques;
- h. Pressure vessels;
- i. Hazardous substances;
- j. Internal and external fire fighting;
- k. Vessel cooling and flame control.

DURATION: 5 days

Fire Fighting & Rescue Team Member

- ASSESSMENT:** A written or oral assessment of the theoretical knowledge gained, with a final assessment by the instructor of all practical exercises. A pass will result in a Training Certificate being issued and a certified record entered in the individuals IADC Training and Operations Passport.
- VALIDITY:** The course has two-year validity. Personnel should undertake a refresher course before expiry of their current certificate.
- EXEMPTIONS:** Personnel in possession of the following IMO STCW Course Certificate with current validity:
- 2.03 – Advanced Training in Fire Fighting

Fire Fighting & Rescue Team Member – Refresher

- COURSE N^o:** 3.1A – FIRE FIGHTING AND RESCUE TEAM MEMBER – REFRESHER
- COURSE TYPE:** Specialist Emergency Response Training
- INTENDED FOR:** All members of the fire fighting and rescue team on a Mobile Offshore Unit (MOU). Participants must be in possession of a valid medical, BIOS or FIOS and Fire Fighting and Rescue Team Member or refresher certificates.
- OBJECTIVE:** The course is designed for personnel assigned to the fire fighting and rescue team to maintain their minimum level of competence in the practical elements of various emergency response scenarios covering both fire and non-fire situations on MOU's.
- LEARNING TARGETS:**
- Roles and Responsibilities:**
- The role of the team during emergencies;
 - Teamwork and response to alarms;
 - Planning and implementing fire fighting measures;
 - Conducting Search and Rescue operations.
- Rescue Techniques:**
- Search and Rescue Techniques;
 - Closed containers and confined spaces;
 - Elementary First Aid;
 - Maintain effective communications;
 - Casualty handling;
 - Chemical incidents including decontamination procedures.
- Fire Fighting & Prevention:**
- Fire fighting theory;
 - Extinguishers, extinguishing agents and hose reels;
 - Fixed protection, detection and alarm systems;
 - Foam equipment;
 - Gas fire characteristics;
 - Hose handling / water protection;
 - Breathing apparatus techniques;
 - Pressure vessels;
 - Hazardous substances;
 - Internal and external fire fighting;
 - Vessel cooling and flame control.
- DURATION:** 2 days

Fire Fighting & Rescue Team Member – Refresher

ASSESSMENT: A written or oral assessment of the theoretical knowledge gained, with a final assessment by the instructor of all practical exercises. A pass will result in a Training Certificate being issued and a certified record entered in the individuals IADC Training and Operations Passport.

VALIDITY: The course has two-year validity. Personnel should undertake a refresher course before expiry of their current certificate.

Fire Fighting & Rescue Team Leader/On-Scene Commander

COURSE N^o: 3.2 – FIRE FIGHTING AND RESCUE TEAM LEADER / ON-SCENE COMMANDER - EMERGENCY RESPONSE TEAMS

COURSE TYPE: Specialist Emergency Response Training

INTENDED FOR: All members designated to lead the fire fighting and rescue team or to act as On-Scene Commander on a Mobile Offshore Unit (MOU). Participants must be in possession of a valid medical, BIOS or FIOS certificate and a Fire Fighting and Rescue Team Member or refresher certificate.

OBJECTIVE: The course is designed for personnel to acquire a thorough knowledge of offshore emergency response plans / provisions / scenarios and the actions that the Emergency Response Teams should take to respond to emergencies on MOU's.

LEARNING TARGETS:

Leadership and Communication:

- a. Leadership role during incident scenarios;
- b. Managing and Co-ordinating Emergency response Team actions;
- c. Delegation of tasks and duties during incidents;
- d. Identifying and dealing with team and individual signs of stress during incidents;
- e. Assessment of team performance;
- f. Lay down and maintain effective lines of communication with the Emergency Response Teams, the Central Emergency Control Room and others;
- g. Provide regular updates / situation reports

Scenario Planning & Strategy:

- a. Assessment of Emergency Situation;
- b. Assessment of resource availability and their suitability;
- c. Formulation of emergency response plan;
- d. Prioritization of emergency response actions;
- e. Allocation of specific emergency response tasks to individual team members;
- f. Awareness of the capabilities and limitations of equipment and resources available
- g. Organisation of scenario exercises and drills.

Situational Awareness:

- a. Protection of Human Life – those involved in the incident, those responding to it and those on other duties;
- b. Limitation of damage to the environment;
- c. Safeguarding MOU integrity and assets;
- d. Limiting escalation of emergency situation;
- e. Path to recovery and normalisation;
- f. Inspection, maintenance and reliability of Emergency Response equipment.

Fire Fighting & Rescue Team Leader/On-Scene Commander

DURATION: 3 days

ASSESSMENT: A written or oral assessment of the theoretical knowledge gained, with a final assessment by the instructor of all practical scenario exercises. A pass will result in a Training Certificate being issued and a certified record entered in the individuals IADC Training and Operations Passport.

VALIDITY: The course has two-year validity. Personnel should undertake a refresher course before expiry of their current certificate.

Fire Fighting & Rescue Team Leader/On-Scene Commander

COURSE N^o: 3.2A – FIRE FIGHTING AND RESCUE TEAM LEADER / ON-SCENE COMMANDER - EMERGENCY RESPONSE TEAMS – REFRESHER

COURSE TYPE: Specialist Emergency Response Training

INTENDED FOR: All Fire Fighting and Rescue Team Leaders or s On-Scene Commanders on a Mobile Offshore Unit (MOU). Participants must be in possession of a valid medical, BIOS or FIOS certificate, Fire Fighting and Rescue Team Member or refresher certificate and a Fire Fighting and Rescue Team Leader / On-Scene Commander or refresher certificate.

OBJECTIVE: The course is designed for personnel to maintain their level of competence and knowledge of offshore emergency response plans/provisions/scenarios and the actions that the Emergency Response Teams should take to respond to emergencies on MOU's.

LEARNING TARGETS:

Leadership and Communication:

- a. Leadership role during incident scenarios, including managing and co-ordinating Emergency Response Team actions;
- b. Delegation of tasks and duties during incidents;
- c. Identifying and dealing with team and individual signs of stress during incidents;
- d. Assessment of team performance;
- e. Maintain effective lines of communication with Response Teams, the Central Emergency Control Room and others.

Scenario Planning & Strategy:

- a. Assessment of Emergency Situation;
- b. Assessment of resource availability and their suitability;
- c. Formulation of emergency response plan;
- d. Prioritization of emergency response actions;
- e. Allocation of specific emergency response tasks to individual team members;
- f. Awareness of the capabilities and limitations of equipment and resources available
- g. Organisation of scenario exercises and drills.

Situational Awareness:

- a. Protection of Human Life – those involved in the incident, those responding to it and those on other duties;
- b. Limitation of damage to the environment;
- c. Safeguarding MOU integrity and assets;
- d. Limiting escalation of emergency situation;
- e. Path to recovery and normalisation;
- f. Inspection, maintenance and reliability of Emergency Response equipment.

Fire Fighting & Rescue Team Leader/On-Scene Commander

DURATION: 2 days

ASSESSMENT: A written or oral assessment of the theoretical knowledge gained, with a final assessment by the instructor of all practical scenario exercises. A pass will result in a Training Certificate being issued and a certified record entered in the individuals IADC Training and Operations Passport.

VALIDITY: The course has two-year validity. Personnel should undertake a refresher course before expiry of their current certificate.

4. IMO STCW Course Information

INTRODUCTION:

This chapter provides a high-level descriptive overview of each of the following IMO STCW Model Courses referenced within this programme handbook. Detailed information about each course can be obtained directly from the Publications Department of the International Maritime Organization.

IMO Model course 1.10 -	Dangerous, Hazardous and Harmful Cargoes;
IMO Model course 1.13 -	Elementary First Aid;
IMO Model course 1.14 -	Medical First Aid;
IMO Model course 1.15 -	Medical Care;
IMO Model course 1.19 -	Personal Survival Techniques;
IMO Model course 1.20 -	Fire prevention and Fire Fighting;
IMO Model course 1.21 -	Personal Safety and Social Responsibilities;
IMO Model course 1.23 -	Proficiency in Survival Craft and Rescue Boats other than Fast Rescue Boats;
IMO Model course 1.24 -	Proficiency in Fast Rescue Boats;
IMO Model course 1.25 -	General Operator's Certificate for Global Maritime Distress and Safety System;
IMO Model course 2.03 -	Advanced Training in Fire Fighting.

MODEL COURSE 1.10 DANGEROUS, HAZARDOUS AND HARMFUL CARGOES

SCOPE:

This course is intended for:

- seafaring personnel responsible for the cargo handling of packaged dangerous, hazardous and harmful cargoes (hereafter referred to as "dangerous goods") aboard ships
- shore-based personnel (including Competent Authority and similar personnel) responsible for the transport of dangerous goods by sea and involved in any of the aspects set out below.

The course includes, but is not limited to, classification, packaging, consignment procedures, loading, segregation, etc.

Most of the course material is common to both target groups, although the time needed for individual topics will vary. For example, seafaring staff need more detailed consideration of stowage than those on shore, whilst the reverse is true of package manufacturing and testing.

The course has been prepared in accordance with sections A-II/2 and B-V/5 of the STCW Code (R1).

The course also provides the basis for training set out in chapter 1.3 of the IMDG Code for shore-based personnel.

The training provided by this course should be supplemented by practical experience at sea, or in shore-based operations as appropriate.

OBJECTIVES: Trainees successfully completing this course are then able to contribute to the preparation and execution of the safe carriage of dangerous goods and marine pollutants by sea. They will understand the legal implications of and correctly apply or verify compliance with the:

1. detailed instructions (including safe packing, handling, stowage and segregation of dangerous, hazardous and harmful cargoes, also the precautions necessary in relation to other cargoes) as set out in the International Maritime Dangerous Goods (IMDG) Code and its Supplement (T1 and T2);
2. IMO/ILO/UNECE Guidelines for the Packing of Cargo Transport Units (CTU's) (B3);
3. Recommendations on the Safe Transport of Dangerous Cargoes and Related Activities in Port Areas (B2); and, as far as they affect the transport of dangerous goods:
 1. Code of Safe Practice for Cargo Stowage and Securing (T4);
 2. Recommendations on the Safe Use of Pesticides in Ships (B4);
 3. International Convention for Safe Containers, 1972 (CSC) (R4).

In addition trainees will have an appreciation of the importance and impact of:

1. Part A of chapter VII of the International Convention for the Safety of Life at Sea, 1974 (SOLAS), as amended (R2);
2. Regulation 11-2/54 of SOLAS 1974, as amended, in respect of ships intended to carry dangerous goods (R2);
3. Annex III of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78) as amended (R3);

Protocol I to MARPOL 73/78, as amended, and the associated reporting procedures set forth in resolution A.648(16), General Principles for Ship Reporting Systems and Ship Reporting Requirements, Including Guidelines for Reporting Incidents Involving Dangerous Goods, Harmful Substances and/or Marine Pollutants, adopted by the IMO Assembly on 27 October 1989 (R3);

OUTLINE:

1. Introduction and course administration;
2. Background and general introduction;
3. Conventions;
4. IMO and dangerous goods;
5. The IMDG Code;
6. Classification - physics and chemistry;
7. Classification - the UN system as used by IMO;
8. Classification - the IMDG classes;
9. Packing and tank requirements;
10. Construction and testing of packaging's, IBCS and portable tanks;
11. Consignment procedures;
12. Limited Quantities;
13. Transport operations;
14. IMDG Code Supplement;
15. Safe transport of dangerous cargoes etc. in port areas;
16. Future updating.

MODEL COURSE 1.13 ELEMENTARY FIRST AID

SCOPE: This model course aims to provide the training for candidates to administer elementary first aid on board ship, in accordance with Section A-VI/1 of the STCW Code.

OBJECTIVES: This syllabus covers the requirements of the 1995 STCW Convention Chapter VI, Section AVI/1, Table A-VI/1-3. On meeting the minimum standard of competence in elementary first aid, a trainee will be competent to take immediate action upon encountering an accident or medical emergency until the arrival of a person with medical first aid skills or the person in charge of medical care on board.

OUTLINE:

Competence: Take immediate action upon encountering an accident or other medical emergency.

Knowledge, understanding and proficiency in:

1. General Principles;
2. Body Structure and Functions;
3. Positioning of Casualty;
4. The Unconscious Casualty;
5. Resuscitation;
6. Bleeding;
7. Management of Shock;
8. Burns and Scalds, and Accidents caused by Electricity;
9. Rescue and Transport of Casualty;
10. Other Topics.

MODEL COURSE 1.14 MEDICAL FIRST AID

SCOPE: This model course aims to provide the training for candidates to provide medical first aid on board ship, in accordance with Section A-VI/4 of the STCW Code.

OBJECTIVES: This syllabus covers the requirements of the 1995 STCW Convention Chapter VI, Section AVI/4, Table A-VI/4-1. On meeting the minimum standard of competence in medical first aid, a trainee will be competent to apply immediate first aid in the event of accident or illness on board.

OUTLINE:

Competence: Apply immediate first aid in the event of accident or illness on board.

Knowledge, understanding and proficiency:

1. Immediate Action;
2. First-aid Kit;
3. Body Structure and Function;
4. Toxicological Hazards aboard Ship;
5. Examination of Patient;
6. Spinal Injuries;
7. Burns, Scalds and Effects of Heat and Cold;
8. Fractures, Dislocations and Muscular Injuries;
9. Medical Care of Rescued Persons, including Distress, Hypothermia and Cold Exposure;
10. Radio Medical Advice;
11. Pharmacology;
12. Sterilization;
13. Cardiac Arrest, Drowning and Asphyxia;
14. Psychological/Psychiatric Problems.

MODEL COURSE 1.15 MEDICAL CARE

SCOPE: This model course aims to provide the training for candidates to provide medical care to the sick and injured while they remain on board ship, in accordance with Section A-VI/4 of the STCW Code.

OBJECTIVES: This syllabus covers the requirements of the 1995 STCW Convention Chapter VI, Section AVI/4, Table A-VI/4-2. On meeting the minimum standard of competence in medical care, a trainee will be competent to participate effectively in co-ordinated schemes for medical assistance on ships at sea and to provide the sick or injured with a satisfactory standard of medical care while they remain on board.

OUTLINE:

Competence 1: Provide medical care to the sick and injured while they remain on board.

Knowledge, understanding and proficiency:

1. First Aid – Revision;
2. Care of Casualties;
3. Aspects of Nursing;
4. Diseases;
5. Alcohol and Drug Abuse;
6. Dental Care;
7. Gynaecology and Pregnancy;
8. Medical Care of Rescued Persons, including Distress, Hypothermia and Cold Exposure;
9. Death at Sea;
10. Environmental Control on Board Ship;
11. Disease Prevention;
12. Keeping of Records;
13. Medicines and Medical Equipment;
14. Surgical Equipment, Instruments and Supplies.

Competence 2: Participate in co-ordinated schemes for medical assistance to ships.

Knowledge, understanding and proficiency:

1. External Assistance

MODEL COURSE 1.19 PROFICIENCY IN PERSONAL SURVIVAL TECHNIQUES

SCOPE: This model course aims to meet the mandatory minimum requirements for seafarers for familiarization, basic safety training and instruction in accordance with Section A-VI/1 of STCW Code.

OBJECTIVES: This syllabus covers the requirements of the 1995 STCW Convention and Code Chapter VI, Section A-VI/1. On meeting the minimum standard of competence in personal survival techniques, a trainee will be able to survive at sea in the event of ship abandonment.

The trainee will be able to:

- don a lifejacket;
- don and use an immersion suit;
- safely jump from a height into the water;
- right an inverted liferaft while wearing a lifejacket;
- swim while wearing a lifejacket;
- keep afloat without a lifejacket;
- board a survival craft from ship and water while wearing a lifejacket;
- take initial actions on boarding survival craft to enhance chance of survival;
- stream a drogue or sea-anchor;
- operate survival craft equipment;
- operate location devices, including radio equipment.

OUTLINE:

Competence: Survive at sea in the event of ship abandonment

Knowledge, understanding and proficiency:

1. Introduction, safety and survival
 - a. Safety guidance;
 - b. Principles of survival at sea;
 - c. Definitions, survival craft and appliances;
 - d. SOLAS training manual;
 - e. Safety symbols.
2. Emergency situations
 - a. Types of emergencies;
 - b. Precautions;
 - c. Fire provisions;
 - d. Foundering;
 - e. Crew expertise and initial familiarization;
 - f. Muster list and emergency signals;
 - g. Crew and emergency instructions;
 - h. Extra equipment and survival;
 - i. Abandoning ship – complications.

3. Evacuation
 - a. Abandoning ship - last resort;
 - b. Personal preparation for abandoning ship;
 - c. Need to prevent panic;
 - d. Crew duties to passengers;
 - e. Crew duties - launching survival craft;
 - f. Master's orders to abandon ship;
 - g. Means of survival.
4. Survival craft and rescue boats
 - a. Lifeboats;
 - b. Liferrafts;
 - c. Rescue boats.
5. Personal life-saving appliances
 - a. Lifebuoys;
 - b. Lifejackets;
 - c. Immersion suits/anti-exposure suit;
 - d. Thermal protective aids.
6. Personal life-saving appliances (demonstrations)
 - a. Lifebuoys;
 - b. Lifejackets;
 - c. Inflatable lifejackets;
 - d. Immersion suits or anti-exposure suit;
 - e. Thermal protective aids;
 - f. Personal survival without a lifejacket;
 - g. Boarding survival craft.
7. Survival at sea
 - a. Dangers to survivors;
 - b. Best use of survival craft facilities.
8. Emergency radio equipment
 - a. Portable radio apparatus for survival craft;
 - b. Emergency position-indicating radio beacons (EPIRB's);
 - c. Search and rescue transponders (SART's).
9. Helicopter assistance (optional)
 - a. Communicating with the helicopter;
 - b. Evacuation from ship and survival craft;
 - c. Helicopter pick-up;
 - d. Correct use of helicopter harness.

MODEL COURSE 1.20 FIRE PREVENTION AND FIRE FIGHTING

SCOPE: This model course aims to provide the training for candidates in fire prevention and fighting in accordance with Section A-VI/1 of the STCW Code

OBJECTIVES: This syllabus covers the requirements of the 1995 STCW Convention Chapter VI, Section AVI/1, paragraph 2 and Table A-VI/1-2. On meeting the minimum standard of competence in fire prevention and fire fighting, a trainee will be competent to take appropriate measures for the safety of personnel and of the ship and to use fire appliances correctly. The trainee will also have knowledge of fire prevention.

OUTLINE:

Competence 1: Minimize the risk of fire

Knowledge, understanding and proficiency:

1. Concept and application of the fire triangle to fire and explosion
 - a. Conditions for fires;
 - b. Properties of flammable materials;
2. Types and sources of ignition
 - a. Fire prevention principles;
3. Flammable materials commonly found on board
 - a. Spread of fire;
 - b. Safe practices;
4. Need for constant vigilance
 - a. Need for constant vigilance
 - b. Patrol systems;
5. Fire hazards

Competence 2: Maintain a state of readiness to respond to emergency situations involving fires.

Knowledge, understanding and proficiency:

1. Organization of shipboard fire fighting
 - a. General emergency alarm;
 - b. Fire control plans and muster list;
 - c. Communications;
 - d. Personnel safety procedures;
 - e. Periodic shipboard drills;
2. Location of fire-fighting appliances and emergency escape routes
 - a. Ship construction arrangements;
 - b. Emergency fire pump (cargo ships);

- c. Chemical powder applicants;
 - d. Emergency escape routes;
3. Fire spread in different parts of a ship
 - a. Fire spread;
 4. Fire and smoke detection measures on ships and automatic alarm systems
 - a. Fire and smoke detection systems;
 - b. Automatic fire alarm;
- f. Classification of fires and applicable extinguishing agents

Competence 3: Fight and extinguish fires

Knowledge, understanding and proficiency:

1. Selection of fire-fighting appliances and equipment
 - a. Fire hoses and nozzles;
 - b. Mobile apparatus;
 - c. Portable fire extinguishers;
 - d. Fireman's outfit;
 - e. Fire blankets;
 - f. Knowledge of fire safety arrangements;
 - g. Fire alarms and first actions;
 - h. Fire fighting;
 - i. Fire-fighting mediums;
 - j. Fire-fighting procedures;
 - k. Small fires;
 - l. Extensive fires;
2. Precautions for and use of fixed installations
 - a. General;
 - b. Smothering effect systems: carbon dioxide (CO₂) and foams;
 - c. Inhibitor effect systems: powders;
 - d. Cooling effect systems: sprinklers, pressure spray;
3. Use of breathing apparatus for fighting fires
 - a. Breathing apparatus;
 - b. Drills in smoke-filled spaces;
4. Use of breathing apparatus for effecting rescues
 - a. Use of breathing apparatus.

MODEL COURSE 1.21 PERSONAL SAFETY AND SOCIAL RESPONSIBILITIES

SCOPE: This model course aims to meet the mandatory minimum requirements for seafarers for familiarization, basic safety training and instruction in accordance with Section A-VI/1 of the STCW Code.

OBJECTIVES: Due to the vastly different environment on a ship as compared to ashore, this course is designed to prepare new recruits for a life at sea. Working on a ship can be a hazardous occupation for the uninitiated. This course will give new seafarers an insight into the various elements of a ship and working procedures on board so that they adjust to the shipboard environment, and are better prepared to cope with any unforeseen circumstances. To that extent this course is planned to make their transition from a shore to a sea career smooth and give some knowledge of ship's working before they actually step on board a ship.

A trainee successfully completing this course will be able to:

- comply with emergency procedures
- take precautions to prevent pollution of the marine environment
- observe safe working practices
- understand orders and be understood in relation to shipboard duties
- contribute to effective human relationships on board ship

OUTLINE:

Competence: In Personal Safety and Social Responsibility

Knowledge, understanding and proficiency:

1. Observe safe working practices
 - a. Introduction;
 - b. Importance of the course;
 - c. Ship familiarization;
 - d. Nature of shipboard hazards;
 - e. Groups the equipment provided on board to counter these hazards;
 - f. Use and demonstration of PPE;
 - g. Lists operations that take place on board which can be hazardous;
 - h. Loading and unloading of cargoes;
 - i. Mooring and unmooring;
 - j. Enclosed spaces;
 - k. Hot work;
 - l. Working aloft;
 - m. Engine-room watchkeeping and maintenance.
2. Contribute to effective human relationships on board ship - Human relationships on board ship
 - a. Interpersonal relationships;
 - b. Team building;
 - c. Team work.

3. Understand orders and be understood in relation to shipboard duties
 - a. Fundamentals of communication;
 - b. Methods of communication;
 - c. Barriers in communication;
 - d. Effective transmission skills;
 - e. Effective listening skills;
 - f. Effects and consequences of wrong communication;
 - g. Communication sum-up

4. Comply with emergency procedures
 - a. Explains the term 'emergency';
 - b. Drills and muster;
 - c. Value and need of drills and training;
 - d. Internal communication.

5. Take precautions to prevent pollution of the marine environment
 - a. Define the term 'pollution';
 - b. Effects of operational or accidental pollution of the marine environment;
 - c. International measures for pollution prevention, pollution avoidance and containment of pollutants;
 - d. Pollution by sewage from ships;
 - e. Pollution by garbage from ships;
 - f. Control of oil discharge from machinery spaces and oil fuel tanks;
 - g. Contents of Oil Record Book;
 - h. Control of discharge of oil and special areas;
 - i. Introduces the contents of Annex VI of MARPOL.

6. Contribute to effective human relationships on board ship(concluded) - Social responsibilities
 - a. Rights and obligation of crew;
 - b. Employment conditions, etc.;
 - c. Drugs and alcohol;
 - d. Health and hygiene on board;
 - e. Summing up.

MODEL COURSE 1.23 PROFICIENCY IN SURVIVAL CRAFT AND RESCUE BOATS OTHER THAN FAST RESCUE BOATS

SCOPE: This model course aims to provide the training for candidates to launch and take charge of a survival craft or rescue boat in emergency situations, in accordance with Section A-VI/2 of the STCW Code.

OBJECTIVES: This syllabus covers the requirements of the 1995 STCW Convention Chapter VI, Section AVI/2, Table A-VI/2-1. On meeting the minimum standard of competence in survival craft and rescue boats other than fast rescue boats, a trainee will be competent to operate life-saving appliances and take charge of a survival craft or rescue boat during or after launch. They will also be able to operate a survival craft engine and manage survivors and survival craft after abandoning ship. Trainees will know the correct use of all locating devices, including communication and signalling apparatus and pyrotechnics, how to apply first aid to survivors and the actions to take to preserve the lives of those in their charge.

OUTLINE:

Competence: Take charge of a survival craft or rescue boat during and after launch; operate a survival craft engine; manage survivors and survival craft after abandoning ship; use locating devices, including communication and signalling apparatus and pyrotechnics; apply first aid to survivors

Knowledge, understanding and proficiency:

1. Introduction and safety
 - a. Introduction;
 - b. Safety guidance.
2. General
 - a. Emergency situations
 - b. Training, drills and operational readiness;
 - c. Actions to be taken when called to survival craft stations.
3. Abandon ship
 - a. Actions to be taken when required to abandon ship
 - b. Actions to be taken when in the water
4. Survival craft and rescue boats
 - a. Lifeboats;
 - b. Liferafts;
 - c. Rescue boats.
5. Launching arrangements
 - a. Boat davits;
 - b. Liferaft davits;
 - c. Rescue boat davits;
 - d. Free-fall;
 - e. Float-free arrangements;
 - f. Marine evacuation systems.

6. Evacuation and recovery of survival craft and rescue boats
 - a. Launching;
 - b. Clearing the ship's side;
 - c. Marshalling liferafts and rescuing survivors from the sea;
 - d. Recovery of survival craft and rescue boats;
 - e. Launching survival craft and rescue boats in rough sea;
 - f. Recovery of rescue boats in rough sea.
 - g. Actions to take when clear of the ship

7. Lifeboat engine and accessories
 - a. Starting the engine
 - b. Cooling systems;
 - c. Battery charging;
 - d. Fire extinguisher;
 - e. Water spray system;
 - f. Self-contained air support system.
 - g. Rescue boat outboard engine

8. Handling survival craft and rescue boats in rough weather
 - a. Boats;
 - b. Liferafts;
 - c. Beaching.

9. Actions to take when aboard a survival craft
 - a. Initial actions;
 - b. Routines for survival;
 - c. Use of equipment;
 - d. Apportionment of food and water;
 - e. Action to take to maximize detectability and location of survival craft.

11. Methods of helicopter rescue
 - a. Communicating with the helicopter;
 - b. Evacuation from ship and survival craft;
 - c. Helicopter pick-up.
12. Hypothermia

13. Radio equipment
 - a. Two-way VHF radiotelephone apparatus;
 - b. Emergency position-indicating radio beacons (EPIRB's);
 - c. Search and rescue transponder beacons (SART's);
 - d. Distress signals, signalling equipment and pyrotechnics

14. First aid
 - a. Resuscitation techniques;
 - b. Use of first-aid kit.

16. Drills in launching liferafts and rescue boats
 - a. Davit-launched liferafts;
 - b. Throw-overboard liferafts;
 - c. Boarding a liferaft from the water;
 - d. Righting an inverted liferaft.

MODEL COURSE 1.24 PROFICIENCY IN FAST RESCUE BOATS

SCOPE: This model course aims to provide the training for candidates to launch and take charge of a fast rescue boat, in accordance with Section A-VI/2 of the STCW Code.

OBJECTIVES: This syllabus covers the requirements of the 1995 STCW Convention Chapter VI, Section AVI/2, Table A-VI/2-2. On meeting the minimum standard of competence in fast rescue boats, a trainee will be competent to handle and take charge such boats during or after launch in adverse weather and sea conditions. They will also be able to operate a fast rescue boat engine. Trainees will know the correct use of all locating devices, including communication and signalling equipment between the rescue boat and a helicopter and the ship; and how to carry out search patterns.

OUTLINE:

Competence 1: Take charge of a fast rescue boat during and after launch

Knowledge, understanding and proficiency:

1. Introduction and safety
 - a. Construction and outfit of fast rescue boats;
 - b. Individual items of equipment.
2. Particular characteristics and facilities of fast rescue boats
 - a. Boat equipment;
 - b. Navigation equipment;
 - c. Safety equipment;
 - d. Emergency equipment;
3. Safety precautions during launch and recovery of a fast rescue boat
 - a. Launching arrangements;
 - b. Launching and recovery;
 - c. Launching and recovery in rough seas;
 - d. Drills in launching and recovery of fast rescue boats.
4. How to handle a fast rescue boat in prevailing and adverse weather and sea conditions
 - a. Clearing the ship's side and coming alongside;
 - b. Manoeuvring at slow speed;
 - c. Manoeuvring at fast speed;
 - d. Boat handling in adverse weather;
 - e. Towing;
 - f. Pacing and transfer;
 - g. Helicopter operation;
 - h. Drills in boat handling;
 - i. Drills in towing;
 - j. Drills in pacing and transfer.

5. Procedures for righting a capsized fast rescue boat
 - a. Capsize and righting;
 - b. Drills in righting a capsized boat.

6. Search patterns and environmental factors affecting their execution
 - a. Initial information and action;
 - b. Search pattern;
 - c. Rescuing survivors from sea;
 - d. Casualty care;
 - e. Drills in search and rescue.

7. Assessment of the readiness of fast rescue boats and related equipment for immediate use
 - a. Boat readiness;
 - b. Equipment readiness.

8. Knowledge of the maintenance, emergency repairs, normal inflation and deflation of buoyancy compartments of inflated fast rescue boats

Competence 2: Operate a fast rescue boat engine

Knowledge, understanding and proficiency:

1. Method of starting and operating a fast rescue boat engine and its accessories
 - a. Inboard motor engines;
 - b. Outboard motor engines;
 - c. Water jet propulsion;
 - d. Drills in engine operation.

MODEL COURSE 1.25 GENERAL OPERATOR'S CERTIFICATE FOR THE GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM

SCOPE: This course covers the training recommendation in annex 3 to IMO Assembly resolution A. 703 (17) - Recommendation on Training of Radio Operators related to the General Operator's Certificate (GOC).

OBJECTIVES: A trainee successfully completing this course and passing the prescribed examination will be enabled to efficiently operate the GMDSS equipment, and to have primary responsibility to radio communications during Distress incidents. Given the severe problems being experienced in the GMDSS as a result of the large number of false Distress alerts that some times occur, training will also be provided in techniques to avoid the unintentional transmission of false Distress alerts and the procedures to use in order to mitigate the effects of false Distress alerts following unintentional transmission.

OUTLINE:

Competence: Operation and use of equipment for the Maritime Mobile Service and the Maritime Mobile-Satellite Service

Knowledge, understanding and proficiency:

1. Principles of maritime radio-communications
 - a. The general principles and basic features of the Maritime Mobile Service;
 - b. The general principles and basic features of the Maritime Mobile-Satellite Service;
 - c. Global Maritime Distress and Safety System (GMDSS).
2. GMDSS communication systems
 - a. Purpose and use of Digital Selective Calling (DSC) facilities;
 - b. Knowledge of the general principles of Narrow-Band Direct Printing (NBDP) and radio telex systems. Ability to use the maritime NBDP and radio telex equipment in practice (emergency);
 - c. Knowledge and use of Inmarsat systems. Ability to use Inmarsat equipment or simulator in practice;
 - d. Fault location and rectification on marine electronic equipment;
 - e. Knowledge of and ability to use in practice the basic equipment of a terrestrial ship station.
3. Other GMDSS equipment
 - a. Emergency Positioning-Indicating Radio Beacons (EPIRB's);
 - b. Search and Rescue Radar Transponder (SART);
 - c. Reception of Maritime Safety Information (MSI).
4. Distress alerting
 - a. Search and Rescue (SAR) operation;
 - b. Distress, Urgency and Safety communication procedures in the GMDSS;
 - c. GMDSS satellite Distress, Urgency and Safety communication procedure;
 - d. Protection of Distress frequencies and avoidance of false Distress alerts.

5. Miscellaneous skills and operational procedures for general communications
 - a. Ability to use the English language, written and spoken, for the satisfactory exchange of communication relevant to the Safety of life at sea;
 - b. Obligatory procedures and practices;
 - c. Practical and theoretical knowledge of general communications procedures.
6. Assessment and discussion

MODEL COURSE 2.03 ADVANCED TRAINING IN FIRE FIGHTING

SCOPE: This model course aims to provide the training in advanced fire fighting in accordance with Section A-VI/3 of the STCW Code. The emphasis of the training is in organization, tactics and command.

OBJECTIVES: This syllabus covers the requirements of the 1995 STCW Convention Chapter VI, Section AVI/3 and Table A-VI/3. On meeting the minimum standard of competence in advanced fire fighting, a trainee will be competent to take command, organize and train fire parties and control fire-fighting operations. The seafarer will have acquired knowledge of fire prevention and an ability to inspect and service fire detection and extinguishing systems and equipment. He will also be able to investigate and report on incidents involving fire.

OUTLINE:

Competence 1: Control fire-fighting operations aboard ship

Knowledge, understanding and proficiency:

1. Introduction, safety and principles;
2. Areas of fire hazard;
3. Fire precautions;
4. Dry distillation;
5. Chemical reactions;
6. Boiler uptake fires and exhaust fires in prime movers and auxiliary exhausts;
7. Fires in water-tube boilers;
8. Tactics and procedure of fire control while ship is at sea;
9. Tactics and procedure of fire control while ship is in port;
10. Tactics and procedure of fire control while ship is carrying dangerous goods;
11. Tactics and procedure of fire control for oil, chemical and gas tankers;
12. Use of water for fire extinguishing, the effect on stability, precautions and corrective procedures;
13. Communication and co-ordination during fire-fighting operations;
14. Ventilation control including smoke extractor;
15. Control of fuel and electrical systems;
16. Fire precautions and hazards associated with the storage and handling of materials (paints etc);
17. Management and control of injured persons;
18. Procedures for coordination with shore-based fire fighters.

Competence 2: Organize and train fire parties

Knowledge, understanding and proficiency:

1. Preparation of contingency plans;
2. Composition and allocation of personnel to fire parties;
3. Training of seafarers in fire-fighting;
4. Fire control plans;
5. Organization of fire and abandon ship drills;
6. Strategies and tactics for control of fires in various parts of the ship.

Competence 3: Inspect and service fire detection and extinguishing systems and equipment.

Knowledge, understanding and proficiency:

1. Fire alarms;
2. Fire detection equipment;
3. Fixed fire-extinguishing equipment;
4. Fire main, hydrants, hoses, nozzles and pumps;
5. Portable and mobile fire extinguishing equipment including appliances;
6. Fire-fighter's outfits and other personal protective equipment;
7. Rescue and life support equipment;
8. Salvage equipment;
9. Communication equipment;
10. Requirements for statutory and classification surveys.

Competence 4: Investigate and compile reports on incidents involving fire.

Knowledge, understanding and proficiency:

1. Fire investigation and reporting;
2. Trainee's experience of fires on ships;
3. Documented reports of fires on ships and lessons learned.

5. Training Criteria

INTRODUCTION:

This chapter provides a detailed description of the training criteria for each course in the IADC Offshore Competency Training Programme to ensure minimum requirements for competency certification are met.

1. Basic Introduction to Offshore Safety (BIOS)

Before being allowed to work offshore, every candidate will receive approved familiarization training based on the learning targets laid down in Part 4 of this handbook and the competencies listed in column 1 of table S.1.1 for each module.

The level of knowledge, understanding and proficiency required of all candidates for certification is listed in column 2 of table S.1.1 for each module.

Every candidate for certification will be required to provide evidence of having achieved the required standard of competence in accordance with the methods for demonstrating and the criteria for evaluating competence as tabulated in columns 3 and 4 of table S.1.1 for each module.

This training will include sufficient information and instruction to enable all candidates to achieve the required basic safety competence to travel and work offshore.

Competence will be assessed by verification for theoretical knowledge and continuous instructor assessment of all practical exercises. Once a candidate achieves the required standard of competence a certificate will be issued.

2. Helicopter Underwater Escape Training (HUET)

Before being allowed to work offshore, every candidate will receive approved HUET training based on the learning targets laid down in Part 4 of this handbook and the competencies listed in column 1 of table S.2.1 for each module.

The level of knowledge, understanding and proficiency required of all candidates for certification is listed in column 2 of table S.2.1 for each module.

Every candidate for certification will be required to provide evidence of having achieved the required standard of competence in accordance with the methods for demonstrating and the criteria for evaluating competence as tabulated in columns 3 and 4 of table S.2.1 for each module.

This training will include sufficient information, instruction and practical exercises to enable all candidates to accomplish safe evacuation from a partially submerged or capsized helicopter.

Competence will be assessed by verification for theoretical knowledge and continuous instructor assessment of all practical exercises. Once a candidate achieves the required standard of competence a certificate will be issued.

3. Further Introduction to Offshore Safety (FIOS)

All candidates will receive a refresher to the BIOS course, known as FIOS every four years to maintain a minimum level of competence and understanding of the conditions and hazards associated with working offshore. This training will be based on the learning targets laid down in Part 4 of this handbook and the competencies listed in column 1 of table S.3.1 for each module.

The level of knowledge, understanding and proficiency required of all candidates for certification is listed in column 2 of table S.3.1 for each module.

Every candidate for certification will be required to provide evidence of having achieved the required standard of competence in accordance with the methods for demonstrating and the criteria for evaluating competence as tabulated in columns 3 and 4 of table S.3.1 for each module.

This training will include sufficient information and instruction to enable all candidates to achieve the required basic safety competence to travel and work offshore.

Competence will be assessed by verification for theoretical knowledge and continuous instructor assessment of all practical exercises. Once a candidate achieves the required standard of competence a certificate will be issued.

BIOS Course - Table S.1.1 - Specification of minimum standard of competence for Safety Introduction (Learning Target 1)

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Brief introduction to offshore	<ul style="list-style-type: none"> ➤ Brief introduction to the oil industry and working offshore; ➤ Working environment in general terms; 	Interactive e-Learning	Question / test for evaluating competence
General safety and security measures	<ul style="list-style-type: none"> ➤ General description of the installation alarm instructions and safety delegate system; ➤ Reporting and control procedures; ➤ Permit to work system; ➤ Prohibited items and general travel precautions. 	Interactive e-Learning / Installation Induction	Question / test for evaluating competence
Individual responsibility for safety	<ul style="list-style-type: none"> ➤ Safety mind set ➤ Personal involvement and engagement ➤ Ergonomics 	Interactive e-Learning	Question / test for evaluating competence, including personal attitudes and behaviour during practical exercises
Protective measures	<ul style="list-style-type: none"> ➤ Various protective measures ➤ Various types of protective equipment ➤ Focus on own safety 	Group work / demonstration / interactive training (e-Learning)	Test questions, including personal attitudes and behaviour during practical exercises
Reporting incidents	<ul style="list-style-type: none"> ➤ Knowledge of Incident Reporting System 	Interactive e-Learning	Question / test for evaluating competence
Introduction to First Aid	<ul style="list-style-type: none"> ➤ Understanding of immediate measures to be taken in situations requiring first aid 	Group work / demonstration / interactive training (e-Learning)	Question / Test and demonstration

BIOS Course - Table S.1.1 - Specification of minimum standard of competence for Helicopter Operations {not HUET} (Learning Target 2)

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Helicopter Operations	<ul style="list-style-type: none"> ➤ Luggage Restrictions ➤ Aircraft <ul style="list-style-type: none"> * Danger Areas * Overview of Installed Survival Equipment ➤ Types of survival suit ➤ Types of life jacket. ➤ Awareness of clothing standards ➤ Overview of supplementary personal survival equipment ➤ In flight ➤ Arrival. 	Group work / demonstration / interactive training (e-Learning)	Questions / Demonstration, including personal attitudes and behaviour

BIOS Course - Table S.1.1 - Specification of minimum standard of competence in personal Survival Techniques (Learning Target 3)

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Survive at sea in the event of installation / rig abandonment	<ul style="list-style-type: none"> ➤ Emergency situations which may occur, e.g. collision, fire, gas release, loss of well control, foundering, weather extremes. ➤ Types of life-saving appliances normally carried on MOUs ➤ Survival craft equipment and the different types of survival craft. ➤ Types of different personal life saving appliances. ➤ Principles concerning personal survival, including: <ul style="list-style-type: none"> * Value of training and drills. * Protective clothing and equipment, * Emergency preparedness, * Actions when called to survival craft stations. * Platform / rig abandonment actions. * Actions when in the water. * Actions when aboard a survival craft or auxiliary vessel. * Main dangers to survivors 	<p>Assessment of evidence obtained from approved training facility and possession of examination certificate.</p> <p>Demonstration of knowledge in:</p> <ul style="list-style-type: none"> ➤ Applicability of individual life saving equipment. ➤ Lifeboat equipment and different types of lifeboats. ➤ Escape chutes; possibilities, limitations and locations. ➤ Throw overboard and davit launched liferafts. ➤ Operation of survival craft equipment. ➤ Responsibilities / duties in the event of abandonment; chain of command during a muster, including Station Bills, Alarm Signals, Escape Routes. ➤ Abandonment hierarchy including; gangways, helicopter, survival craft, escape chutes, liferafts, scramble net, knotted ropes, internal ladders, inertia reel systems, personnel baskets. <p>Practical demonstration of competence to:</p> <ul style="list-style-type: none"> * Put on and use lifejacket and survival suit. Jump from height (not greater than 3m) into water wearing lifejacket & survival suit. * Correct use of escape chutes and other escape systems. * Swim and stay in the water wearing a survival suit. * Right an inverted liferaft wearing a survival suit and lifejacket and correctly enter it. * Handling of a capsized liferaft. * Operate survival craft equipment. * Show correct passenger behaviour on alarm sounding, mustering, embarkation and launch of a survival craft. 	<ul style="list-style-type: none"> ➤ Action taken on identifying muster signals is appropriate to the indicated emergency and complies with established procedures. ➤ The timing and sequence of individual actions are appropriate to the prevailing circumstance and conditions and minimize potential dangers and threats to survival ➤ Method of boarding survival craft is appropriate and avoids dangers to other survivors ➤ Initial actions after leaving the rig and procedures and actions in water to minimize threats to survival

BIOS Course - Table S.1.1 - Specification of minimum standard of competence in Basic Fire Fighting & Self Rescue (Learning Target 4)

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
<p>Train personnel in the theory and practice of Basic Fire Fighting & Self Rescue</p>	<ul style="list-style-type: none"> ➤ React to alarms & emergency situations(identification of materials & equipment in relation to the way of acting, muster points) ➤ Understand the fire-fighting team's role during a fire & other emergency situations ➤ Fire-fighting activities in general (use of portable fire-fighting equipment) ➤ Preceding actions(select & put on the required personnel protective equipment, work with breathing protection, carry out relevant checks prior to entering emergency area) ➤ Enter the area of the incident & perform the activities in a safe manner ➤ Rescue of personnel ➤ Rescue & fire-fighting at helicopter incidents ➤ Maintain effective communications 	<p>Assessment of evidence obtained from approved training facility & possession of examination certificate:</p> <p>Demonstration of knowledge in:</p> <ul style="list-style-type: none"> ➤ Smoke hood and emergency escape set ➤ Various classes of fires, e.g. A, B, C, D, E & F ➤ Fixed systems & detection systems ➤ Hose handling/water protection & extinguishers ➤ Gas characteristics & hazardous substances ➤ Pressure vessels/confined space & closed containers ➤ Teamwork & communication ➤ Gas/chemical characteristics <p>Practical demonstration of competence to:</p> <ul style="list-style-type: none"> ➤ Internal fire-fighting involving Class A, B & E fires ➤ Smoke hood and emergency escape set ➤ Use of extinguishers & hose reels ➤ Incident stabilizations including cooling and isolation ➤ Use of portable foam equipment 	<ul style="list-style-type: none"> ➤ To identify the main principles of fire-fighting/prevention on offshore installations ➤ Correct use of fire extinguishers A,B, C, D & E fires ➤ To perform & demonstrate the correct use of hose reels & escape equipment ➤ Demonstrate correct use of self rescue equipment to escape from smoke filled spaces

HUET Course - Table S.2.1 - Specification of minimum standard of competence for Helicopter Safety (Learning Target 1)

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
General safety measures associated with helicopter transportation	<ul style="list-style-type: none"> ➤ Awareness of helicopter escape routes, exit points and their operation; ➤ Response to flight safety instructions; ➤ Awareness of helicopter safety and emergency procedures in various stages of flight; ➤ Response to in-flight incidents. 	Interactive e-Learning / Group work / demonstration	Question / test for evaluating competence, including personal attitudes and behaviour

HUET Course – Table S.2.1 – Specification of minimum standard of competence for Personal Survival Equipment (Learning Target 2)

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Application, use and availability of Personal Survival Equipment	<ul style="list-style-type: none"> ➤ Awareness, understanding & use of survival suits, emergency breathing system & aviation lifejacket; ➤ Personal survival equipment and emergency breathing system floatation dynamics; ➤ Durations of re-breathing personal & compressed air systems. 	Interactive e-Learning / Group work / demonstration	Question / test for evaluating competence, including personal attitudes and behaviour during practical exercises

HUET Course - Table S.2.1 - Specification of minimum standard of competence for Helicopter Emergency Equipment (Learning Target 3)

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Application, use and availability of Helicopter Emergency Equipment	<ul style="list-style-type: none"> ➤ Awareness and use of equipment onboard; ➤ Awareness of aircraft floatation characteristics; ➤ Awareness and response to alarms and in-flight emergency communications. 	Group work / demonstration / interactive training (e-Learning)	Question / test for evaluating competence, including personal attitudes and behaviour during practical exercises

HUET Course - Table S.2.1 - Specification of minimum standard of competence for Response to an Emergency (Learning Target 4)

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Actions to take prior to an emergency landing	<ul style="list-style-type: none"> ➤ Actions to take in response to aircrew instructions; ➤ Necessary personal equipment checks to undertake prior to emergency landing; ➤ Adoption of Brace Position; ➤ Location and operation of exit mechanisms ➤ Awareness of hazards associated with controlled emergency dry and wet landings and ditching into sea. 	Group work / demonstration / interactive training (e-Learning)	Question / test for evaluating competence, including personal attitudes and behaviour during practical exercises

HUET Course - Table S.2.1 - Specification of minimum standard of competence for Survival at Sea (Learning Target 5)

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
<p>Actions to take in response to an emergency landing</p>	<ul style="list-style-type: none"> ➤ Correct use of helicopter liferaft and personal protective equipment; ➤ Correct procedure / technique for dry escape from a controlled helicopter landing in the sea to an aviation liferaft; ➤ Correct procedure / technique for escaping from a partially submerged helicopter: <ul style="list-style-type: none"> • Without windows and without emergency breathing system; • With windows and with emergency breathing system; ➤ Correct procedure / technique for escaping from a capsized helicopter: <ul style="list-style-type: none"> • Without windows but with emergency breathing system; • With windows and with emergency breathing system; ➤ Group and individual survival techniques. 	<p>Group work / demonstration</p>	<p>Question / test for evaluating competence, including personal attitudes and behaviour during practical exercises</p>

FIOS Course - Table S.3.1 - Specification of minimum standard of competence for Safety Introduction (Learning Target 1)

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
General safety and security measures	<ul style="list-style-type: none"> ➤ General description of the installation alarm instructions and safety delegate system; ➤ Reporting and control procedures; ➤ Permit to work system; ➤ Prohibited items and general travel precautions. 	Interactive e-Learning / Installation Induction	Question / test for evaluating competence
Individual responsibility for safety	<ul style="list-style-type: none"> ➤ Safety mind set ➤ Personal involvement and engagement ➤ Ergonomics 	Interactive e-Learning	Question / test for evaluating competence, including personal attitudes and behaviour during practical exercises
Protective measures	<ul style="list-style-type: none"> ➤ Various protective measures ➤ Various types of protective equipment ➤ Focus on own safety 	Group work / demonstration / interactive training (e-Learning)	Test questions, including personal attitudes and behaviour during practical exercises
Reporting incidents	<ul style="list-style-type: none"> ➤ Knowledge of Incident Reporting System 	Interactive training (e-Learning)	Question / test for evaluating competence
Introduction to First Aid	<ul style="list-style-type: none"> ➤ Understanding of immediate measures to be taken in situations requiring first aid 	Group work / demonstration / interactive training (e-Learning)	Question / Test and demonstration

FIOS Course - Table S.3.1 - Specification of minimum standard of competence for Helicopter Operations {incl. HUET} (Learning Target 2)

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
Helicopter Operations	<ul style="list-style-type: none"> ➤ Luggage Restrictions ➤ Aircraft <ul style="list-style-type: none"> * Danger Areas * Overview of Installed Survival Equipment ➤ Types of survival suit ➤ Types of life jacket. ➤ Awareness of clothing standards ➤ Overview of supplementary personal survival equipment ➤ In flight ➤ Arrival. 	Group work / demonstration / interactive training (e-Learning)	Questions / Demonstration, including personal attitudes and behaviour

FIOS Course - Table S.3.1 - Specification of minimum standard of competence in personal Survival Techniques (Learning Target 3)

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
<p>Survive at sea in the event of installation / rig abandonment</p>	<ul style="list-style-type: none"> ➤ Emergency situations which may occur, e.g. collision, fire, gas release, loss of well control, foundering, weather extremes. ➤ Types of life-saving appliances normally carried on MOU's ➤ Survival craft equipment and the different types of survival craft. ➤ Types of different personal life saving appliances. ➤ Principles concerning personal survival, including: <ul style="list-style-type: none"> * Value of training and drills. * Protective clothing and equipment, * Emergency preparedness, * Actions when called to survival craft stations. * Platform / rig abandonment actions. * Actions when in the water. * Actions when aboard a survival craft or auxiliary vessel. * Main dangers to survivors 	<p>Assessment of evidence obtained from approved training facility and possession of examination certificate.</p> <p>Demonstration of knowledge in:</p> <ul style="list-style-type: none"> ➤ Applicability of individual life saving equipment. ➤ Lifeboat equipment and different types of lifeboats. ➤ Escape chutes; possibilities, limitations and locations. ➤ Throw overboard and davit launched liferafts. ➤ Operation of survival craft equipment. ➤ Responsibilities / duties in the event of abandonment; chain of command during a muster, including Station Bills, Alarm Signals, Escape Routes. ➤ Abandonment hierarchy including; gangways, helicopter, survival craft, escape chutes, liferafts, scramble net, knotted ropes, internal ladders, inertia reel systems, personnel baskets. <p>Practical demonstration of competence to:</p> <ul style="list-style-type: none"> * Put on and use lifejacket and survival suit. Jump from height (not greater than 3m) into water wearing lifejacket & survival suit. * Correct use of escape chutes and other escape systems. * Swim and stay in the water wearing a survival suit. * Right an inverted liferaft wearing a survival suit and lifejacket and correctly enter it. * Handling of a capsized liferaft. * Operate survival craft equipment. * Show correct passenger behaviour on alarm sounding, mustering, embarkation and launch of a survival craft. 	<ul style="list-style-type: none"> ➤ Action taken on identifying muster signals is appropriate to the indicated emergency and complies with established procedures. ➤ The timing and sequence of individual actions are appropriate to the prevailing circumstance and conditions and minimize potential dangers and threats to survival ➤ Method of boarding survival craft is appropriate and avoids dangers to other survivors ➤ Initial actions after leaving the ship and procedures and actions in water minimize threats to survival

FIOS Course - Table S.3.1 - Specification of minimum standard of competence in Basic Fire Fighting & Self Rescue (Learning Target 4)

Competence	Knowledge, understanding and proficiency	Methods for demonstrating competence	Criteria for evaluating competence
<p>Train personnel in the theory and practice of Basic Fire Fighting & Self Rescue</p>	<ul style="list-style-type: none"> ➤ React to alarms & emergency situations(identification of materials & equipment in relation to the way of acting, muster points) ➤ Understand the fire-fighting team's role during a fire & other emergency situations ➤ Fire-fighting activities in general (use of portable fire-fighting equipment) ➤ Preceding actions(select & put on the required personnel protective equipment, work with breathing protection, carry out relevant checks prior to entering emergency area) ➤ Enter the area of the incident & perform the activities in a safe manner ➤ Rescue of personnel ➤ Rescue & fire-fighting at helicopter incidents ➤ Maintain effective communications 	<p>Assessment of evidence obtained from approved training facility & possession of examination certificate:</p> <p>Demonstration of knowledge in:</p> <ul style="list-style-type: none"> ➤ Smoke hood and emergency escape set ➤ Various classes of fires, e.g. A, B, C, D, E & F ➤ Fixed systems & detection systems ➤ Hose handling/water protection & extinguishers ➤ Gas characteristics & hazardous substances ➤ Pressure vessels/confined space & closed containers ➤ Teamwork & communication ➤ Gas/chemical characteristics <p>Practical demonstration of competence to:</p> <ul style="list-style-type: none"> ➤ Internal fire-fighting involving Class A, B & E fires ➤ Smoke hood and emergency escape set ➤ Use of extinguishers & hose reels ➤ Incident stabilizations including cooling and isolation ➤ Use of portable foam equipment 	<ul style="list-style-type: none"> ➤ To identify the main principles of fire-fighting/prevention on offshore installations ➤ Correct use of fire extinguishers A,B, C, D & E fires ➤ To perform & demonstrate the correct use of hose reels & escape equipment ➤ Demonstrate correct use of self rescue equipment to escape from smoke filled spaces

6. Verification

The verification scheme described below will be used by IADC as part of its accreditation process for training schools, establishments, companies and organisations wishing to offer courses based on the IADC Offshore Competency Training Programme.

CRITERIA:

An organization that applies for IADC Accreditation will be reviewed according to the following:

- Training Policy and Procedures Document;
- Identification of Job Positions to be deemed competent through this programme;
- Training Resources and Methods to support the training and development process;
- Assessment System – a means to assess an employee's competence;
- Record System – a means of documenting satisfactory completion of training and assessments;
- Quality Assurance – a formal means of self directed auditing for adherence to the published policies and procedures and reporting on a periodic basis.

INTRODUCTION :

IADC has developed a system of accrediting company Competence Assurance Programmes to assure that they meet accepted practices to develop and ensure the skills of their personnel.

The accreditation focuses on the following required criteria:

- **Training Policy and Procedures document** – a directive that shows management commitment and support providing a published Training Policy and an overview of the implementation and management process and procedures. This can be an element of the company's Management System and/or a standalone Training and Development Policy and Procedures Document. This document should also include the company's Training Objectives including total commitment to a training process that ensures demonstrated knowledge, skills and competencies.

This Training Policy and Procedures document should provide details in each of the following topics as a minimum:

- Purpose – A statement defining why this programme exists and what it should do
- Scope – A statement defining those entities covered by these policies and procedures
- Responsibility – A statement defining the roles and responsibilities at all levels within the organization in managing and/or participating in this process
- Procedure – A particular method or instruction which when followed will ensure compliance with the policy.

Some additional sections that may be included if considered appropriate would be:

- Reference Documentation
- Definitions

- **Identification of job positions to be deemed competent through this programme.**
 - List of Job Positions to be included in the programme
 - Formal procedures have been put in place to design and approve competences
 - List of required job related competencies for each position
 - An organized reference system specifying overall training requirements by position

- **Training Resources and methods to support the training and development process:**
 - On Job Training
 - Company Training
 - Third Party Training Providers
 - Certification and/or Compliance Training Programmes

- **Assessment System** – a means to assess and deem employees competent to the job.
 - Formal procedures have been put in place for assessment of employees in Job Positions included in the programme
 - Methods for assessment will be defined to include but not limited to:
 - Observation – Direct observation of the person carrying out a task;
 - Simulation – Where direct observation is not possible, then a simulation of the task can be carried out and competence recorded accordingly;
 - Questioning – By asking questions, the assessor can determine knowledge and experience of a task or operation;
 - Records – It may be the case that records exist that would prove that this task was competently carried out in the past.

- **Record System** – a means of documenting satisfactory completion of training assessments.

- **Quality Assurance** – a formal means of self directed auditing for adherence to the published policies and procedures and reporting on a periodic basis
 - Audits are planned and conducted
 - Discrepancies are noted for corrective action
 - Corrective action is completed
 - Preventive Action is defined
 - Records and reports are filed

ACCREDITATION PROCESS:

To initiate the accreditation process, an organization must submit a completed application with the appropriate fee to IADC. Copies of the application and other relevant documents will be available from the IADC web site or directly from IADC.

The submitted application will be reviewed by IADC staff to ensure that all required materials are present. Any deficiencies will be noted and the applicant will be provided an opportunity to correct them.

IADC will schedule an on-site audit of the organization's competence assurance system. The audit team will consist of one or more persons selected from IADC staff, IADC consultants, industry representatives, or subject matter experts.

The audit team will use a systematic approach to verify that the programme meets established criteria by reviewing programme documentation, procedures, and resources. The audit team will issue a report noting its findings and any recommendations to the IADC Competence Assurance Review Panel. The panel will be balloted as to whether to award accreditation based on the recommendations of the audit team.

They can decide to award one of the following:

- Approval of accreditation
- Approval subject to compliance with recommended improvements
- Approval on documented completion of significant improvements
- Rejection for reasons to be cited

Upon approval of accreditation, the organization will be issued a Certificate of Accreditation by IADC. The organization will also be authorized to reference IADC accreditation in its literature and other materials.

7. IADC Training and Operations Passport

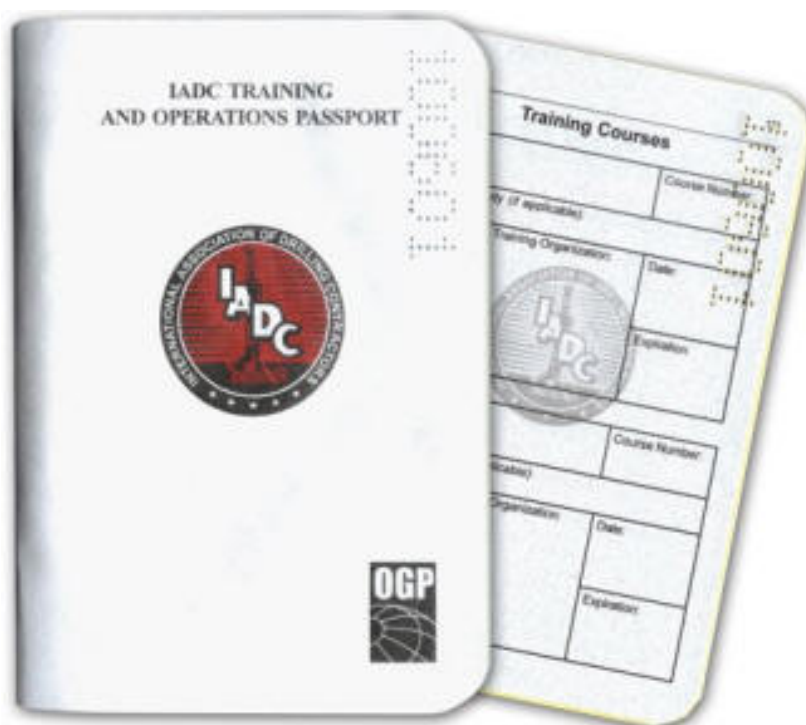
INTRODUCTION:

The IADC Training and Operations Passport is a personal document that was revised in 2006 with enhanced security features, complete with a tear resistant weatherproof Tyvek® cover and housed in a clear plastic wallet.

The enlarged Passport contains space to record personal details and all certified training courses undertaken by the holder, along with certified medical and immunisation information as well as operational assignments.

The purpose of the passport is to provide evidence of the suitability of the holder to perform the required offshore operations in a safe and competent manner, wherever in the world they may be working. The passport does not replace national specific requirements for “Smart Cards”, but is a means to “Fast Track” the issue of such digitized record cards.

The IADC Training and Operations Passport is **not an identity card nor is it a** replacement for an official passport issued by the holders’ country of citizenship.



OBJECTIVE:

The IADC Training and Operations Passport is a means by which the holder can demonstrate their level of knowledge, understanding and proficiency based on the certified entries in the document. The aim is to provide improved security to employers

and others, relating to the competency and suitability of an individual to travel and work offshore on a Mobile Offshore Unit. The IADC Training and Operations Passport can be used by the Drilling Contractor as a means of assurance of the individual's medical / psychological suitability and competency in addition to satisfying local / national legislative requirements.

WHO IS IT FOR?

The IADC Training and Operations Passport is the personal property of the holder.

WHAT SHOULD BE INCLUDED?

Personal data of the holder along with current employer information should be recorded in the Passport. In addition to all medical examinations, certified training courses that have been completed satisfactorily as well as company training and operational assignments should also be recorded in the Passport.

WHO SHOULD ENTER THE INFORMATION?

The Drilling Contractor as well as the holder are both responsible for the accuracy of the content of the IADC Training and Operations Passport:

- ◆ the Drilling Contractor (or by his order an IADC accredited training establishment) should provide a certified entry of all training and operational assignments undertaken by the holder in the passport;
- ◆ the physician should provide a certified entry for all medical examinations that the holder undertakes;
- ◆ the physician or other suitably qualified person should provide a certified entry for all immunisation / vaccinations that the holder receives.

SECURITY:

Every IADC Training and Operations Passport has a unique number perforated through the front and back cover and all pages. In addition, each page of the passport has provision for the holders' name. IADC maintains a record of which numbers are issued to each company or individual. Accredited training Establishments will use this number as the unique identifier, prefixed by IADC when issuing certificates to course participants.

The holder of the passport is required to supply all relevant certificates / documents pertaining to entries made in the IADC Training and Operations Passport to their employer, who should keep a separate file of such certificates / documents for this purpose.

VERIFICATION OF ENTRIES:

All entries made in the passport should be checked / verified periodically by the Drilling Contractor / employer to ensure no fraudulent entries have been made. Any irregularities should be investigated by the Drilling Contractor / employer and resolved prior to allowing the holder offshore.

WHERE TO ORDER?

The IADC Training and Operations Passport is available from:

IADC
PO Box 1430
6501 BC Nijmegen,
The Netherlands
Phone +31-24-675-2252
Fax +31-24-360-0759
e-mail: anne.otten@iadc.org

IADC
PO Box 4287
Houston, Texas 77210-4287
USA
Phone +1-713-292-1945
Fax +1-713-292-1946
e-mail: passport@iadc.org

Cost: Members: \$10.00 / € 8.00 each.
 Non-members: \$12.00 / € 10.00 each.

WHO CONTROLS THE TRAINING AND OPERATIONS PASSPORT?

The IADC Training and Operations Passport is controlled by the Training Committee of IADC.

This control includes the text of the passport and any required amendments. Any suggested amendments to or complaints about the IADC Training and Operations Passport may be submitted to IADC for the attention of the Director of Accreditation and Certification at:

PO Box 4287
Houston
Texas 77210-4287
USA

tel.: +1 713 292 1945 fax.: +1 713 292 1946 e-mail: info@iadc.org

Appendix 1 - Abbreviations / Acronyms

A	
ALARP	As Low As Reasonably Practicable
B	
BIOS	Basic Introduction to Offshore Safety
C	
CAA	Civil Aviation Authority
CBT	Computer Based Training
D	
D	Germany
DEA	Danish Energy Authority
DK	Denmark
E	
EBS	Emergency Breathing System
EPIRB	Emergency Positioning-Indicating Radio Beacon
ESD	Emergency shutdown
F	
FIOS	Further Introduction to Offshore Safety
G	
GMDSS	The Global Maritime Distress and Safety System
GOC	General Operator's Certificate
H	
HLO	Helicopter Landing Officer
HSE	Health and Safety Executive, the United Kingdom
HS&E	Health, Safety and Environment
H₂S	Hydrogen Sulphide
HUET	Helicopter Underwater Escape Training
I	
IADC	International Association of Drilling Contractors
IMCA	International Marine Contractors Association
IMO	International Maritime Organisation
ISPS	International Ship and Port Facility Security Code
L	
LBEG	Landesamt für Bergbau, Energie und Geologie
LTA	Lost Time Accident
M	
MOB	Man overboard
MODU	Mobile Offshore Drilling Unit
MOU	Mobile Offshore Unit (Accommodation, Crane Barge, Drilling, etc)
N	

N	Norway
NL	The Netherlands
NOGEPA	Netherlands Oil and Gas Exploration and Production Association
NPD	Norwegian Petroleum Directorate
O	
OGP	International Association of Oil and Gas Producers
OIM	Offshore Installation Manager
OLF	Oljeindustriens Landsforening (Norwegian Oil Industry Association)
OPITO	Offshore Petroleum Industry Training Organization
P	
POB	Personnel onboard
PPE	Personal Protective Equipment
PSA	Petroleum Safety Authority, Norway
PSL	Personal Safety Logbook
PTIL	Petroleumstilsynet (Petroleum Safety Authority, Norway)
PTW	Permit to Work
R	
ROC	Restricted Operator's Certificate
S	
SART	Search and Rescue Radar Transponder
SodM	Staatstoezicht op de Mijnen
SSM	State Supervision of Mines, The Netherlands
STCW	Standards of Training Certification & Watchkeeping
T	
TM	
U	
UK	United Kingdom
UKOOA	UK Offshore Operators Association, now Oil & Gas UK
W	
WEG	Wirtschaftsverband Erdöl- und Erdgasgewinnung

Appendix 2 – Reciprocity Matrices

This appendix provides a tabulation of courses that are acceptable alternatives to specific IADC courses. In some instances, additional modules may be necessary to obtain full recognition of a particular course. Beneath each matrix is a list of the additional training requirements necessary, with a further explanation at the end of this appendix.

Reciprocity Matrix for Basic Offshore Safety Course including HUET

ACTION BY COURSE	IADC	NORWAY (OLF)	THE NETHERLANDS (NOGEPA)	DENMARK (DEA)	UNITED KINGDOM (OIL & GAS UK / OPITO)
IADC (BIOS)		ACCEPT (1)	ACCEPT	ACCEPT	ACCEPT?
NORWAY (OLF) (BASIC SAFETY & EMERGENCY TRAINING)	ACCEPT		ACCEPT		
THE NETHERLANDS (NOGEPA) (OFFSHORE SAFETY INTRODUCTION)	ACCEPT	ACCEPT			
DENMARK (DEA) (BASIC SAFETY)	ACCEPT				
UNITED KINGDOM (OIL & GAS UK / OPITO) (BOSIET)	ACCEPT				

Note:

1. Acceptance based on additional local induction on Norwegian Integrated Survival Suits and Norwegian Legislation if not incorporated in the BIOS course

Reciprocity Matrix for Refresher of Basic Offshore Safety Course including HUET

ACTION	IADC	NORWAY (OLF)	THE NETHERLANDS (NOGEPA)	DENMARK (DEA)	UNITED KINGDOM (OIL & GAS UK / OPITO)
IADC (FIOS)		ACCEPT (1)	ACCEPT	ACCEPT	ACCEPT?
NORWAY (OLF) (SAFETY & EMERGENCY TRAINING REFRESHER)	ACCEPT		ACCEPT		
THE NETHERLANDS (NOGEPA) (OFFSHORE SAFETY REFRESHER)	ACCEPT	ACCEPT			
DENMARK (DEA) (BASIC SAFETY REFRESHER)	ACCEPT				
UNITED KINGDOM (OIL & GAS UK / OPITO) (FOET)	ACCEPT	ACCEPT	ACCEPT		

Notes:

1. Acceptance based on additional local induction on Norwegian Integrated Survival Suits and Norwegian Legislation if not incorporated in the FIOS course

Appendix 3 – Course Lesson Schedules and Plans

To ensure that accredited Training Establishments undertake IADC courses detailed in this programme in a consistent and professional manner, IADC has developed individual lesson schedules and plans for such establishments to follow.

A training establishment must clearly demonstrate that all IADC courses it is accredited to provide, fully complies with these schedules and plans. Compliance will be monitored as part of the continuing accreditation / audit process to ensure that standards are maintained.

Course Lesson Schedules provide a flexible structured approach to accomplish the training criteria detailed in Chapter 5 of this competency training programme, whilst the course Lesson Plans indicate the precise methodology that an Accredited Training Establishment is required to follow. Together, this will ensure that each course is consistently applied and that participants accomplish the required degree of competency based on learning targets in Chapter 5 of the programme.

Lesson Schedule - IADC Basic Introduction to Offshore Safety Course (BIOS) course 1.1

Maximum Course size 12 persons in two groups of 6

E-LEARNING MODULES TO BE COMPLETED PRIOR TO COURSE PARTICIPATION – 3HOURS (PRINTABLE HANDOUT)	
◆ Introduction to Offshore:- Activities, Operations, Installations	Learning Target 1a
◆ HSE Legislation in Denmark, Germany, The Netherlands, Norway, United Kingdom and the role of the individual regulatory agencies	Learning Target 1b
◆ Emergency Response / Preparedness	Learning Target 1b
◆ Individual responsibility for HSE / HSE Culture / Reporting Accidents	Learning Target 1c & e
◆ Personal Protective Equipment and Measures	Learning Target 1d
◆ Helicopter Operational Safety: Pre-boarding, in-flight and arrival	Learning Target 2a

MODULE	DAY 1	MODULE	DAY 2
1.0	30mins – Course Registration & Centre Induction	6.0	60mins - Survival at Sea – Theory (Learning Target 3)
2.0	30mins – E-Learning Competency Written Examination – (minimum pass 75%)	7.0	180mins – Sea Survival Practical Exercises (LT 3)
3.0	150mins – Introduction to First Aid – Theory & Practice (Learning Target 1f)	8.0	30mins – Fire Fighting & Self Rescue – Theory (Learning Target 4)
4.0	15mins – First Aid Written Examination	9.0	180mins – Fire Fighting - Practical Exercises (LT4)
5.0	150mins – Individual Responsibility for HSE – Practice (Learning Target 1c) - Behaviour, Controls, Procedures, Barriers, PPE	10.0	20mins - HSE Culture, Sea Survival and Fire Fighting Written Examination– (minimum pass 75%)
		11.0	10min - Debrief

Course Lesson Plan - IADC Basic Introduction to Offshore Safety (BIOS)

Participants with current and valid STCW certificates (1.13 + 1.19 + 1.20 + 1.21) (less than 3 years old) are exempt from undertaking most Modules of this course lesson plan, except Module 2.0 – e-learning package written examination. However, they will be required to undertake the e-learning package to provide them with the required familiarization necessary to enable them to work offshore drilling industry.

Participants entering the offshore drilling industry for the first time must undertake the e-learning package prior to attending the BIOS course, where they will be required to sit and pass a written examination to assess their level of knowledge retention before being allowed to participate in the course.

The Sea Survival and Fire Fighting – Practical Exercises (Modules 7.0 & 9.0) require special controls to ensure the safety of participants at all times. Consequently, the maximum number of participants for each exercise detailed within Modules 7.0 and 9.0 must not exceed six and the instructor / diver (in water)(Module 7.0 only) / supervisor / participant ratio must accord with the following table. Whenever the course maximum number of participants (12) is reached, two groups will be formed to accord with the table below:

Participants	Instructor	Safety Diver	Supervisor
1	1	1	1
2	1	1	1
3	1	1	1
4	1	1	1
5	1	1	1
6	1	1	1

Specific Sea Survival practical exercises (Module 7c) must take place under realistic offshore conditions. When this exercise is performed in a pool, the following environmental standards must be applied: wave height 0.5m; wind circa 10m/sec; water spray of participants by hose or sprinkler system; light conditions preferably to reflect both day and night situations.

Assessment: Course staff will continuously monitor and assess the skills and knowledge acquired by participants throughout the course, together with specific written examinations as detailed.

Course Lesson Plan - IADC Basic Introduction to Offshore Safety (BIOS)

Module 1.0 Course Registration and Training Centre Induction:

Duration	Subject	Equipment	Location & Method	Learning Targets
30mins	<p>Course Registration:</p> <ul style="list-style-type: none"> ◆ Medical Fitness ◆ Centre Documentation ◆ Centre Induction – health & safety <p>Course introduction</p> <ul style="list-style-type: none"> ◆ Course Objective ◆ Overview of Learning Targets ◆ Outline of Course Programme (how delegates can achieve what is expected of them) ◆ Certification / IADC Passport ◆ Introduction to Centre / Course Staff ◆ Assessment Process 	<p>Visual Aids, Literature and Handbook</p> <p>Visual Aids & Literature</p>	<p><i>Classroom</i></p> <p>Explanation by Training Centre Staff</p>	

Module 2.0 E-Learning Competency Examination:

Duration	Subject	Equipment	Location & Method	Learning Targets
30mins	<p>Subjects to be covered in the examination include:</p> <ul style="list-style-type: none"> ◆ Overview of North West European HSE Regulations and Regulatory Agencies, with specific details for local operating area ◆ Emergency Preparedness and Response ◆ HSE Culture / Individual Responsibility for HSE ◆ Personal Protective Equipment and Measures ◆ Helicopter Safety 	<p>Visual Aids and Examination Papers</p>	<p><i>Classroom</i></p> <p>Explanation and Invigilation by Course Instructors / Centre Staff</p>	<p>Learning Target 1 - (b, c, d & e)</p> <p>Learning Target 2 - (a) Minimum requirement 75% pass with no blank modules</p>

Course Lesson Plan - IADC Basic Introduction to Offshore Safety (BIOS)

Module 3.0 Introduction to First Aid – Theory and Practice:

Duration	Subject	Equipment	Location & Method	Learning Targets
150mins	<p>a) Explain what lifesaving first aid involves:</p> <ul style="list-style-type: none"> ◆ General Principles ◆ Body Structure and Functions ◆ Degrees of consciousness <p>b) Explain and demonstrate the most important behaviour principles following an accident:</p> <ul style="list-style-type: none"> ◆ Securing the site / one's own safety ◆ Positioning the Casualty ◆ Life-saving first aid ◆ Alerting others <p>c) Awareness of Symptoms, Causes & Treatment of:</p> <ul style="list-style-type: none"> ◆ Hypothermia ◆ Respiratory failure ◆ Cardiac arrest <p>d) Awareness how to Rescue & Transport a Casualty:</p> <ul style="list-style-type: none"> ◆ Management of Shock ◆ Behaviour in Water ◆ Special Hypothermia Hazards <p>e) Perform Life Saving First Aid to:</p> <ul style="list-style-type: none"> ◆ Free the Airways ◆ Stop Bleeding ◆ Prevent Circulatory Failure ◆ Resuscitate a Casualty (CPR) ◆ Treat Burns, Broken Bones and Hypothermia 	<p>Visual Aids, Resuscitation Mannequins, First Aid Kits, Face Shields, Cleansing / Sterilising Wipes, Blankets, PPE, Examples of portable Onboard First Aid Equipment available (e.g. Defibrillator)</p>	<p><i>Classroom</i></p> <p>Explanation with a bias for Practical Demonstrations by Course Instructors of all elements and Participant exercises</p> <p>The emphasis being on Life Saving First Aid not Medical First Aid and Care</p>	<p>Learning Target 1 – (f)</p>

Course Lesson Plan - IADC Basic Introduction to Offshore Safety (BIOS)

Module 4.0 First Aid – Written Examination:

Duration	Subject	Equipment	Location & Method	Learning Targets
15mins	Subjects to be covered in the examination include: <ul style="list-style-type: none"> ◆ What Life Saving First Aid involves ◆ Important Behaviour Principles ◆ Symptoms Causes and Treatment of common conditions ◆ Rescue and Transportation of a Casualty 	Visual Aids and Examination Papers	<i>Classroom</i> Explanation and Invigilation by Course Instructors	Learning Target 1 - (f) Minimum requirement 75% pass with no blank modules

Course Lesson Plan - IADC Basic Introduction to Offshore Safety (BIOS)

Module 5.0 Individual Responsibility for HSE – Practice (Behaviour, Controls, Procedures, Barriers, PPE):

Duration	Subject	Equipment	Location & Method	Learning Targets
150mins	<p>a) Workplace Controls:</p> <ul style="list-style-type: none"> ◆ Management System, Policies & Procedures ◆ HSE Case / Acknowledgement of Compliance ◆ Active HSE Campaigns (e.g. time out for HSE) ◆ HSE Observation Systems (e.g. Job Safety Analysis / Workplace Mapping) ◆ Human, Technical & Organisational HSE Barriers and Defences (e.g. Permits) ◆ Individual Responsibility for Safe Behaviour and Cleanliness, including Workplace <p>b) Individual Competence:</p> <ul style="list-style-type: none"> ◆ Training, Skills & Experience for Specific Agreed Roles and Responsibilities ◆ Mentoring, Supervision & HSE Representation <p>c) Co-operation at the Workplace:</p> <ul style="list-style-type: none"> ◆ Warn of Dangerous Situations and Unsafe Acts ◆ Ensure Proper & Appropriate Use of PPE ◆ Follow instructions & Workplace Controls ◆ Work as a Team, Looking out for Co-Workers <p>d) Open Communication:</p> <ul style="list-style-type: none"> ◆ Show Responsibility and Advise of Unsafe Conditions ◆ Two Way Dialogue ◆ Active Participation at HSE Meetings 	Visual Aids, Video's / DVD's, PPE examples of documents in current use	<p><i>Classroom</i></p> <p>Explanation with Practical Demonstrations / Exercises and Questions regarding all elements by Course Instructors together with group involvement by Participants.</p> <p>Workplace Job Safety Analysis Scenario, including development of Permit to Work conditions</p>	Learning Target 1 – (c)

Course Lesson Plan - IADC Basic Introduction to Offshore Safety (BIOS)

Module 6.0 Survival at Sea - Theory:

Duration	Subject	Equipment	Location & Method	Learning Targets
60mins	<p>a) Evacuation Systems</p> <ul style="list-style-type: none"> ◆ Evacuation hierarchy (helicopter, TEMPSC etc) ◆ Lifeboats (TEMPSC & Freefall) Liferrafts (conventional, davit & hydrostatic launch) ◆ Personal Descending Escape Devices (Skyscape, ladders, ropes, walkway, scramble nets) ◆ Muster and Evacuation points ◆ Drills, Exercises and Emergency Procedures ◆ Rescue by Support Vessels & Helicopters <p>b) Personal Survival Equipment</p> <ul style="list-style-type: none"> ◆ Overview of Survival Suit Types in common North West European use ◆ Donning Survival Suit Common to Region ◆ Overview of Aviation and Maritime Life Jackets ◆ Donning both types of Life Jacket ◆ Overview of Emergency Breathing Systems in Common Use <p>c) Helicopter Emergency Equipment</p> <ul style="list-style-type: none"> ◆ Awareness of Onboard Equipment ◆ Awareness of & Response to Alarms & In-Flight Emergency Communications 	Visual Aids, Video's / DVD's, Commonly used North West European Survival Suits (including Integrated Suits), Aviation and Maritime Lifejackets, Pyrotechnics, PPE and Emergency Equipment	<i>Poolside Classroom</i> Explanation with Practical Demonstration and Exercises by Course Instructors, together with group involvement by Participants of all elements	Learning Target 2 – (b) Learning Target 3 - (a, b, c, e & f)

Course Lesson Plan - IADC Basic Introduction to Offshore Safety (BIOS)

Module 7.0 Survival at Sea - Practical:

Duration	Subject	Equipment	Location & Method	Learning Targets
180mins	<p>a) Water Survival</p> <ul style="list-style-type: none"> ◆ Donning Survival Suit Common to Region ◆ Donning Maritime (Buoyant) Life Jacket ◆ Floatation Dynamics of Suits & Life Jackets ◆ Jump from height (min 2m, max 3m) wearing Survival Suit and buoyant lifejacket ◆ Use of Personal Descending Equipment, to include Skyscape & Scramble Nets ◆ Survival techniques (incl. swimming, circle, rescue, towing and use of protective devices) <p>b) TEMPSC Actions & Survival</p> <ul style="list-style-type: none"> ◆ Mustering and Embarkation techniques ◆ Positioning, Fastening and Safety once onboard ◆ TEMPSC Equipment including Emergency ◆ Lowering and release mechanisms <p>c) Liferaft Actions & Survival</p> <ul style="list-style-type: none"> ◆ Launching a Liferaft from poolside ◆ Righting a capsized liferaft wearing survival suit and lifejacket and correctly boarding it ◆ Handling a Liferaft in realistic conditions* <p>d) Rescue from the Sea</p> <ul style="list-style-type: none"> ◆ Co-operation with Rescuer ◆ Rescue from a Liferaft using Helicopter Rescue Harness / Strop / Sling 	Commonly used North West European Survival Suits, Maritime Lifejackets, Liferaft, TEMPSC, Helicopter Harness and Emergency Equipment	<p><i>Pool/ Poolside</i></p> <p>Explanation with Practical Demonstration & Participant exercises given by Course Instructors, with Divers & Pool Supervisor in position at all times during practical exercises to assist participants</p>	<p>Learning Target 3 - (a, b, c, d & e)</p> <p>* Realistic Conditions: Wave Height: circa 0.5m Wind circa: 10m/sec Water Spray Light: Day & Night</p>

Course Lesson Plan - IADC Basic Introduction to Offshore Safety (BIOS)

Module 8.0 Fire Fighting and Self Rescue - Theory:

Duration	Subject	Equipment	Location & Method	Learning Targets
30mins	<p>a) Common Causes of Fire Onboard</p> <ul style="list-style-type: none"> ◆ Ignition of Hydrocarbons resulting from Operational Incidents ◆ Ignition of products in the Accommodation & Galley ◆ Electrical and Welding Fires ◆ Poisoning Effects of Fire & Use of Smoke Hoods / Emergency Escape Sets <p>b) Extinguishing Media and Systems</p> <ul style="list-style-type: none"> ◆ Installed Active and Passive Detection and Protection Systems ◆ Identifying and using the Correct Equipment for initial response, CO₂, Dry Powder, Foam, Water, Hose Reels, Fire Blankets <p>c) Emergency Response Teams</p> <ul style="list-style-type: none"> ◆ Personal Responsibility & Action to Take on finding a Hazardous Situation ◆ When to Leave it for the Professionals ◆ Role of Emergency Teams (the Professionals) ◆ Necessity for Teamwork and Communication 	Visual Aids, Video's / DVD's, Various Fire Extinguishers, Fire Blanket, Smoke Hoods / Escape Sets	<p><i>Classroom</i></p> <p>Explanation with Practical Demonstration by Course Instructors, of all elements</p>	Learning Target 4 - (a, b, c, d & e)

Course Lesson Plan - IADC Basic Introduction to Offshore Safety (BIOS)

Module 9.0 Fire Fighting and Self Rescue - Practical:

Duration	Subject	Equipment	Location & Method	Learning Targets
180mins	<p>a) Portable Extinguishers</p> <ul style="list-style-type: none"> ◆ Recognise the different types of Extinguisher ◆ Choose the correct Extinguisher for the fire type, based on capacity capabilities and limitations ◆ Demonstration and Technique of using Portable Extinguishers safely, by Course Instructor ◆ Using the Correct Technique, operate each type of Extinguisher in a safe and controlled manner to extinguish each fire type (A, B & E), Minimum 2 per participant <p>b) Small Bore Hose Reel</p> <ul style="list-style-type: none"> ◆ Demonstration and Technique of using Small Bore Hose Reel safely, by Course Instructor ◆ Participants using the correct Technique, to safely Extinguish a Class A fire with Hose Reel <p>c) Fire Blanket</p> <ul style="list-style-type: none"> ◆ Demonstration and Technique of using Fire Blanket safely, by Course Instructor ◆ Participants using the correct Technique, to safely Extinguish a Class B fire with Fire Blanket <p>d) Self Rescue from Compartment (Total Darkness)</p> <ul style="list-style-type: none"> ◆ Demonstration of Technique by Instructor ◆ Individual Self Rescue – no cosmetic smoke ◆ Group Self Rescue – smoke filled area ◆ Group Self Rescue – smoke filled area with heat 	<p>Fire Extinguishers (CO2, Dry Powder, Foam and Water)</p> <p>Hose Reel & Fire Blanket</p> <p>Fuel (liquid & solid) for Practical Exercises (A, B & E)</p> <p>Respiratory Protection (Smoke Hoods)</p> <p>Torches</p> <p>Props and Equipment for Exercises</p> <p>First Aid Equipment</p> <p>Resuscitator</p>	<p><i>Fire Ground</i></p> <p>Explanation with Practical Demonstration & Participant exercises given by Course Instructors, with Supervisor in position at all times during practical exercises to assist participants</p>	<p>Learning Target 4 - (c, d & e)</p>

Course Lesson Plan - IADC Basic Introduction to Offshore Safety (BIOS)

Module 10.0 HSE Culture, Sea Survival and Fire Fighting – Written Examination:

Duration	Subject	Equipment	Location & Method	Learning Targets
20mins	Subjects to be covered in the examination include: <ul style="list-style-type: none"> ◆ Workplace Controls ◆ Individual Competence ◆ Co-operation at the Workplace ◆ Open Communication ◆ Evacuation Systems ◆ Personal Survival Equipment ◆ Helicopter Emergency Equipment ◆ Common Causes of Fire Onboard ◆ Extinguishing Media and Systems ◆ Emergency Response Teams 	Visual Aids and Examination Papers	<i>Classroom</i> Explanation and Invigilation by Course Instructors	Learning Target 1 - (a, b, c, d & e) Learning Target 2 - (a, b & c) Learning Target 3 - (a, b, c, d, e & f) Learning Target 4 - (a, b & c) Minimum requirement 75% pass with no blank modules

Course Lesson Plan - IADC Basic Introduction to Offshore Safety (BIOS)

Module 11.0 BIOS Debrief:

Duration	Subject	Equipment	Location & Method	Learning Targets
10mins	<p>On completion of the written examination, the course instructor will then debrief the participants on the activities and exercises undertaken over the two days.</p> <p>Following which, the Instructor will ask the course participants if they have sustained any injury during the course that the training establishment is not aware of.</p> <p>The course instructor will ask all participants to complete the training establishments' feedback form for the IADC BIOS course.</p> <p>Any participant that has failed to meet the required learning targets will be advised and informed about the options available to them.</p> <p>Individual course certificates will be issued to all successful participants and a record entered into their IADC Training and Operations Passport.</p>	<p>Course feedback forms</p> <p>Course Certificate and validated record in participants IADC Training & Operations Passport</p>	<p><i>Classroom</i></p> <p>Question and Answer Session with Explanations as appropriate</p>	

Lesson Schedule - IADC Helicopter Underwater Escape Training Course (HUET) course 2.1
Maximum Course size 12 persons but a maximum of 3 persons per HUET exercise

Module	Day 1
1.0	30mins – Course Registration, Centre Induction
2.0	60mins – Helicopter Safety, Theory (Learning Targets 1, 3 & 4)
3.0	60mins – Personal Survival Equipment, Helicopter Emergency Equipment and Response to an Emergency (LT's 2, 3 & 4)
4.0	240mins – Helicopter Escape practical exercises (Learning Targets 2, 3, 4 & 5)
5.0	30mins – HUET debrief

Course Lesson Plan - IADC Helicopter Underwater Escape Training (HUET)

Stand alone Course: All personnel are required to fulfil all aspects of this course lesson plan.

Combined Course (with BIOS or FIOS): Participants undertaking the HUET course in combination with either the Basic Introduction to Offshore Safety (BIOS) or the Further Introduction to Offshore Safety (FIOS) courses will not be required to undertake aspects already covered within those courses, typically, module 1.0; and parts of 3.0 a).

The Sea Survival – Practical Helicopter Escape Module (4.0) requires special controls to ensure the safety of participants at all times. Under no circumstances are participants allowed to breath off personal air in an EBS for more than 30 seconds. Consequently, the maximum number of participants for each exercise detailed within Module 4.0 must not exceed three and the instructor / diver (in water) / supervisor / participant ratio must accord with the following table:

Participants	Instructor	Safety Diver	Pool Supervisor
1	1	1	1
2	2	2	1
3	2	2	1

Assessment: The skills and knowledge acquired by Participants during all theoretical and practical elements will be continuously monitored and assessed by course staff.

Course Lesson Plan - IADC Helicopter Underwater Escape Training (HUET)

Module 1.0 Course Registration and Centre Induction:

Duration	Subject	Equipment	Location & Method	Learning Targets
30mins	<p>Course Registration:</p> <ul style="list-style-type: none"> ◆ Medical Fitness ◆ Centre Documentation ◆ Centre Induction – health & safety <p>Course introduction</p> <ul style="list-style-type: none"> ◆ Course Objective ◆ Overview of Learning Targets ◆ Outline of Course Programme (how delegates can achieve what is expected of them) ◆ Certification / IADC Passport ◆ Introduction to Centre / Course Staff ◆ Assessment Process 	<p>Visual Aids, Literature and Handbook</p> <p>Visual Aids & Literature</p>	<p><i>Classroom</i></p> <p>Explanation by Training Centre Staff</p>	

Module 2.0 Helicopter Safety and Escape Theory:

Duration	Subject	Equipment	Location & Method	Learning Targets
60mins	<p>Pre Flight Safety & Response to Emergencies</p> <ul style="list-style-type: none"> ◆ Common Helicopter Types ◆ Helicopter Safety, Flight Safety Briefings ◆ Escape routes and exit operation ◆ Emergency Procedures in various flight stages, Response to Safety Instructions ◆ Actions to take in Response to In-Flight incidents ◆ Awareness of Hazards Associated with Controlled Emergency Landing or Ditching ◆ Aircraft floatation characteristics 	<p>Visual Aids, Video's / DVD's</p>	<p><i>Classroom</i></p> <p>Explanation by Course Instructors</p>	<p>Learning Target 1 - (a, b, c, d, e, f, & g)</p> <p>Learning Target 3 - (c)</p> <p>Learning Target 4 - (a, & e)</p>

Course Lesson Plan - IADC Helicopter Underwater Escape Training (HUET)

Module 3.0 Personal Survival Equipment, Helicopter Emergency Equipment & Response to Emergencies:

Duration	Subject	Equipment	Location & Method	Learning Targets
60mins	<p>a) Personal Survival Equipment (<i>if not undertaken as part of the Basic Introduction to Offshore Safety or Further Introduction to Offshore Safety Courses</i>)</p> <ul style="list-style-type: none"> ◆ Overview of Common Survival Suit Types in North West European use, including integrated suits ◆ Donning Survival Suit Common to Region ◆ Overview of Aviation Life Jackets ◆ Donning of Life Jacket ◆ Overview of Emergency Breathing Systems in Common Use ◆ Floatation Dynamics of Survival Suits, Life Jackets and Emergency Breathing Systems <p>b) Helicopter Emergency Equipment</p> <ul style="list-style-type: none"> ◆ Awareness of Onboard Equipment ◆ Awareness of & Response to Alarms & In-Flight Emergency Communications <p>c) Response to Emergencies</p> <ul style="list-style-type: none"> ◆ Personal Equipment Checks ◆ Brace Position ◆ Location & Operation of Exit Mechanism 	<p>Visual Aids, Video's / DVD's, Commonly used North West European Survival Suits, Aviation Lifejackets, Emergency Breathing System Equipment, Helicopter Passenger Seatbelt, Helicopter Liferaft and Emergency Equipment</p>	<p><i>Poolside Classroom & Helicopter Module</i></p> <p>Explanation with Practical Demonstrations by Course Instructors of all elements and Participant exercises</p>	<p>Learning Target 2 - (a, b, c, d, & e)</p> <p>Learning Target 3 - (a & b)</p> <p>Learning Target 4 - (b, c & d)</p>

Course Lesson Plan - IADC Helicopter Underwater Escape Training (HUET)

Module 4.0 Survival at Sea – Practical Helicopter Escape:

Duration	Subject	Equipment	Location & Method	Learning Targets
240mins	<p>a) Emergency Breathing System (EBS):</p> <ul style="list-style-type: none"> ◆ Overview of Equipment to be used including their safe working durations ◆ Donning & operation of emergency breathing system equipment ◆ Pre ditch checks ◆ Procedures to be followed ◆ Safety arrangements/procedures ◆ Methods of assessment ◆ Principles of emergency breathing equipment using compressed air ◆ Floatation dynamics associated with EBS <p>b) EBS Practical Exercises:</p> <ul style="list-style-type: none"> ◆ Donning Survival Suit, Aviation Lifejacket, Emergency Breathing Equipment and helmet ◆ Verify the integrity of the EBS unit ◆ Carry out breathing actions using EBS at atmospheric pressures in dry conditions ◆ Carry out breathing actions in pool environment, with positive and negative pressure created by body orientation in the water ◆ Moving through water in a submerged state with the aid of a guide line, with EBS fitted, from one side of the pool to the other 	<p>Visual Aids, Commonly used North West European Survival Suit, Aviation Lifejacket, Emergency Breathing System Equipment, Safety Helmets,</p>	<p><i>Pool, Poolside & Helicopter Module</i></p> <p>Explanation with Practical Demonstrations and Participant Exercises given by Course Instructors, with Divers & Pool Supervisor in position at all times during practical exercises to assist participants</p>	<p>Learning Target 2 - (a, b, c, d, & e)</p> <p>Learning Target 3 - (a & b)</p> <p>Learning Target 4 - (b, c & d)</p>

Course Lesson Plan - IADC Helicopter Underwater Escape Training (HUET)

Module 4.0 Survival at Sea – Practical Helicopter Escape continued:

Duration	Subject	Equipment	Location & Method	Learning Targets
	<p>SAFETY NOTE</p> <p>The maximum duration a delegate can be expected to breath off personal air in the EBS is 30 seconds.</p> <p>c) Helicopter Escape Practical Exercises:</p> <ol style="list-style-type: none"> 1). Emergency Dry Landing: <ul style="list-style-type: none"> ◆ Escape, controlled by aircrew ◆ Operate an escape mechanism found on current helicopters 2). Water Surface Evacuation <ul style="list-style-type: none"> ◆ Deploy EBS ◆ Escape by nominated exit into Helicopter liferaft ◆ Carry out vital & secondary actions in liferaft (may be undertaken at poolside) 3). Partial Submersion without EBS (upright) <ul style="list-style-type: none"> ◆ Escape through an exit, which is underwater, but without a window and without using EBS 4). Partial Submersion using EBS (upright) <ul style="list-style-type: none"> ◆ Escape through an exit, which is underwater, with a window fitted, using EBS 	<p>Survival Suit, Aviation Lifejacket, Emergency Breathing System Equipment, Safety Helmets, Helicopter Liferaft, Helicopter Module</p>	<p><i>Pool, Poolside & Helicopter Module</i></p> <p>Explanation with Practical Demonstrations and Participant Exercises given by Course Instructors, with Divers & Pool Supervisor in position at all times during practical exercises to assist participants</p>	<p>Learning Target 5 - (a, b, c & d)</p>

Course Lesson Plan - IADC Helicopter Underwater Escape Training (HUET)

Module 4.0 Survival at Sea – Practical Helicopter Escape continued:

Duration	Subject	Equipment	Location & Method	Learning Targets
	<p>5). Capsize 180° using EBS</p> <ul style="list-style-type: none"> ◆ Deploy EBS on water surface prior to helicopter capsize ◆ Escape through an exit which is underwater, but without a window fitted <p>6). Capsize 180° using EBS</p> <ul style="list-style-type: none"> ◆ Deploy EBS on water surface prior to helicopter capsize ◆ Escape through an exit which is underwater, with a window fitted ◆ Inflate lifejacket on reaching surface and deploy spray hood ◆ Swim and form a survival circle ◆ Carry out group and individual survival techniques under supervision of instructor 	<p>Survival Suit, Aviation Lifejacket, Emergency Breathing System Equipment, Safety Helmets, Helicopter Liferaft, Helicopter Module</p>	<p><i>Pool, Poolside & Helicopter Module</i></p> <p>Explanation with Practical Demonstrations and Participant Exercises given by Course Instructors, with Divers & Pool Supervisor in position at all times during practical exercises to assist participants</p>	<p>Learning Target 5 - (a, b, c & d)</p>

Course Lesson Plan - IADC Helicopter Underwater Escape Training (HUET)

Module 5.0 HUET Debrief:

Duration	Subject	Equipment	Location & Method	Learning Targets
30mins	<p>On completion of pool exercises, all participants shall be given time to dry off and change, prior to assembling in a poolside classroom. The course instructor will then debrief the participants on the day's activities and exercises.</p> <p>Following which, the Instructor will ask the course participants if they have sustained any injury during the day that the training establishment is not aware of.</p> <p>The course instructor will ask all participants to complete the training establishments' feedback form for the IADC HUET course.</p> <p>Any participant that has failed to meet the required learning targets will be advised and informed about the options available to them.</p> <p>Individual course certificates will be issued to all successful participants and a record entered into their IADC Training and Operations Passport.</p>	<p>Course feedback forms</p> <p>Course Certificate and validated record in participants IADC Training & Operations Passport</p>	<p><i>Poolside Classroom</i></p> <p>Question and Answer Session with Explanations as appropriate</p>	

Lesson Schedule - IADC Further Introduction to Offshore Safety Course (FIOS) course 2.2

Maximum Course size 12 persons in two groups of 6

E-LEARNING MODULES TO BE COMPLETED PRIOR TO COURSE PARTICIPATION – 3HOURS (PRINTABLE HANDOUT)	
◆ HSE Legislation in Denmark, Germany, The Netherlands, Norway, United Kingdom and the role of the individual regulatory agencies	Learning Target 1b
◆ Emergency Response / Preparedness	Learning Target 1b
◆ Individual responsibility for HSE / HSE Culture / Reporting Accidents	Learning Target 1c & e
◆ Personal Protective Equipment and Measures (Drills & Exercises)	Learning Target 1d
◆ Helicopter Operational Safety: Pre-boarding, in-flight and arrival	Learning Target 2a

MODULE	DAY 1	MODULE	DAY 2
1.0	30mins – Course Registration & Centre Induction	6.0	60mins – First Aid Practical Exercises (Learning Target 1)
2.0	30mins – E-Learning Competency Written Examination – (minimum pass 75%)	7.0	60mins - Helicopter Safety, Theory (Learning Target 2)
3.0	150mins – Individual Responsibility for HSE – practical exercises - Behaviour, Controls, Procedures, Barriers, PPE (LT 1)	8.0	60mins – Personal Survival Equipment, Helicopter Emergency Equipment and Response to an Emergency (LT's 1, 2, 3, 4)
4.0	150mins – Sea Survival practical exercises (Learning Target 3)	9.0	240mins – Helicopter Escape practical exercises (Learning Target 2)
5.0	150mins – Fire Fighting and Self Rescue practical exercises (Learning Target 4)	10.0	30min - Debrief

Course Lesson Plan - IADC Further Introduction to Offshore Safety (FIOS)

This course is for Participants who have already successfully completed a BIOS course within the last four years or those with STCW exemptions from the BIOS course (Temporarily suspended). All Participants must undertake the e-learning package prior to attending the FIOS course, where they will be required to sit and pass a written examination to assess their level of knowledge retention before being allowed to participate in the course.

The Sea Survival and Fire Fighting – Practical Exercises (Modules 4.0 & 5.0) require special controls to ensure the safety of participants at all times. Consequently, the maximum number of participants for each exercise detailed within Modules 4.0 and 5.0 must not exceed six and the instructor / diver (in water) (Module 4.0 only) / supervisor / participant ratio must accord with the following:

Participants	Instructor	Safety Diver	Pool Supervisor
1	1	1	1
2	1	1	1
3	1	1	1
4	1	1	1
5	1	1	1
6	1	1	1

The Sea Survival – Practical Helicopter Escape Module (9.0) also requires special controls to ensure the safety of participants at all times. Under no circumstances are participants allowed to breath off personal air in an EBS for more than 30 seconds. Consequently, the maximum number of participants for each exercise detailed within Module 9.0 must not exceed three and the instructor / diver (in water) / supervisor / participant ratio must accord with the following:

Participants	Instructor	Safety Diver	Pool Supervisor
1	1	1	1
2	2	2	1
3	2	2	1

Assessment: Course Instructors will continuously monitor the skills & knowledge acquired by Participants during the two days.

Course Lesson Plan - IADC Further Introduction to Offshore Safety (FIOS)

Module 1.0 Course Registration and Training Centre Induction:

Duration	Subject	Equipment	Location & Method	Learning Targets
30mins	<p>Course Registration:</p> <ul style="list-style-type: none"> ◆ Medical Fitness ◆ Centre Documentation ◆ Centre Induction – health & safety <p>Course introduction</p> <ul style="list-style-type: none"> ◆ Course Objective ◆ Overview of Learning Targets ◆ Outline of Course Programme (how delegates can achieve what is expected of them) ◆ Certification / IADC Passport ◆ Introduction to Centre / Course Staff ◆ Assessment Process 	<p>Visual Aids, Literature and Handbook</p> <p>Visual Aids & Literature</p>	<p><i>Classroom</i></p> <p>Explanation by Training Centre Staff</p>	

Module 2.0 E-Learning Competency Examination:

Duration	Subject	Equipment	Location & Method	Learning Targets
30mins	<p>Subjects to be covered in the examination include:</p> <ul style="list-style-type: none"> ◆ Overview of North West European HSE Regulations and Regulatory Agencies, with specific details for local operating area ◆ Emergency Preparedness and Response ◆ HSE Culture / Individual Responsibility for HSE ◆ First Aid ◆ Personal Protective Equipment and Measures ◆ Helicopter Safety ◆ Fire Fighting & Sea Survival Theory 	<p>Visual Aids and Examination Papers</p> <p>Minimum requirement 75% pass with no blank modules</p>	<p><i>Classroom</i></p> <p>Explanation and Invigilation by Course Instructors / Centre Staff</p>	<p>Learning Target 1 - (b, c, d & e)</p> <p>Learning Target 2 - (a)</p> <p>Learning Target 4 – (a & b)</p>

Course Lesson Plan - IADC Further Introduction to Offshore Safety (FIOS)

Module 3.0 Individual Responsibility for HSE – Practice (Behaviour, Controls, Procedures, Barriers, PPE):

Duration	Subject	Equipment	Location & Method	Learning Targets
150mins	<p>a) Workplace Controls:</p> <ul style="list-style-type: none"> ◆ Management System, Policies & Procedures ◆ HSE Case / Acknowledgement of Compliance ◆ Active HSE Campaigns (e.g. time out for HSE) ◆ HSE Observation Systems (e.g. Job Safety Analysis / Workplace Mapping) ◆ Human, Technical & Organisational HSE Barriers and Defences (e.g. Permits) ◆ Individual Responsibility for Safe Behaviour and Cleanliness, including Workplace <p>b) Individual Competence:</p> <ul style="list-style-type: none"> ◆ Training, Skills & Experience for Specific Agreed Roles and Responsibilities ◆ Mentoring, Supervision & HSE Representation <p>c) Co-operation at the Workplace:</p> <ul style="list-style-type: none"> ◆ Warn of Dangerous Situations and Unsafe Acts ◆ Ensure Proper & Appropriate Use of PPE ◆ Follow instructions & Workplace Controls ◆ Work as a Team, Looking out for Co-Workers <p>d) Open Communication:</p> <ul style="list-style-type: none"> ◆ Show Responsibility and Advise of Unsafe Conditions ◆ Two Way Dialogue ◆ Active Participation at HSE Meetings 	Visual Aids, Video's / DVD's, PPE examples of documents in current use	<p><i>Classroom</i></p> <p>Explanation with Practical Demonstrations / Exercises and Questions regarding all elements by Course Instructors together with group involvement by Participants.</p> <p>Workplace Job Safety Analysis Scenario, including development of Permit to Work conditions</p>	<p>Learning Target 1 – (b, c, d & e)</p> <p>Learning Target 3 – (f)</p>

Course Lesson Plan - IADC Further Introduction to Offshore Safety (FIOS)

Module 4.0 Survival at Sea - Practical:

Duration	Subject	Equipment	Location & Method	Learning Targets
150mins	<p>a) Water Survival</p> <ul style="list-style-type: none"> ◆ Donning Survival Suit Common to Region ◆ Donning Maritime (Buoyant) Life Jacket ◆ Floatation Dynamics of Suits & Life Jackets ◆ Jump from height (min 2m, max 3m) wearing Survival Suit and buoyant lifejacket ◆ Use of Personal Descending Equipment, to include Skyscape & Scramble Nets ◆ Survival techniques (incl. swimming, circle, rescue, towing and use of protective devices) <p>b) TEMPSC Actions & Survival</p> <ul style="list-style-type: none"> ◆ Mustering and Embarkation techniques ◆ Positioning, Fastening and Safety once onboard ◆ TEMPSC Equipment including Emergency ◆ Lowering and release mechanisms <p>c) Liferaft Actions & Survival</p> <ul style="list-style-type: none"> ◆ Launching a Liferaft from poolside ◆ Righting a capsized liferaft wearing survival suit and lifejacket and correctly boarding it ◆ Handling a Liferaft in realistic conditions* <p>d) Rescue from the Sea</p> <ul style="list-style-type: none"> ◆ Co-operation with Rescuer ◆ Rescue from a Liferaft using Helicopter Rescue Harness / Strop / Sling 	Commonly used North West European Survival Suits, Maritime Lifejackets, Liferaft, TEMPSC, Helicopter Harness and Emergency Equipment	<p><i>Pool/ Poolside</i></p> <p>Explanation with Practical Demonstration & Participant exercises given by Course Instructors, with Divers & Pool Supervisor in position at all times during practical exercises to assist participants</p>	<p>Learning Target 3 - (a, b, c, d & e)</p> <p>* Realistic Conditions: Wave Height: circa 0.5m Wind circa: 10m/sec Water Spray Light: Day & Night</p>

Course Lesson Plan - IADC Further Introduction to Offshore Safety (FIOS)

Module 5.0 Fire Fighting and Self Rescue - Practical:

Duration	Subject	Equipment	Location & Method	Learning Targets
180mins	<p>a) Portable Extinguishers</p> <ul style="list-style-type: none"> ◆ Recognise the different types of Extinguisher ◆ Choose the correct Extinguisher for the fire type, based on capacity capabilities and limitations ◆ Demonstration and Technique of using Portable Extinguishers safely, by Course Instructor ◆ Using the Correct Technique, operate each type of Extinguisher in a safe and controlled manner to extinguish each fire type (A, B & E), Minimum 2 per participant <p>b) Small Bore Hose Reel</p> <ul style="list-style-type: none"> ◆ Demonstration and Technique of using Small Bore Hose Reel safely, by Course Instructor ◆ Participants using the correct Technique, to safely Extinguish a Class A fire with Hose Reel <p>c) Fire Blanket</p> <ul style="list-style-type: none"> ◆ Demonstration and Technique of using Fire Blanket safely, by Course Instructor ◆ Participants using the correct Technique, to safely Extinguish a Class B fire with Fire Blanket <p>d) Self Rescue from Compartment (Total Darkness)</p> <ul style="list-style-type: none"> ◆ Demonstration of Technique by Instructor ◆ Individual Self Rescue – no cosmetic smoke ◆ Group Self Rescue – smoke filled area ◆ Group Self Rescue – smoke filled area with heat 	<p>Fire Extinguishers (CO2, Dry Powder, Foam and Water)</p> <p>Hose Reel & Fire Blanket</p> <p>Fuel (liquid & solid) for Practical Exercises (A, B & E)</p> <p>Respiratory Protection (Smoke Hoods)</p> <p>Torches</p> <p>Props and Equipment for Exercises</p> <p>First Aid Equipment</p> <p>Resuscitator</p>	<p><i>Fire Ground</i></p> <p>Explanation with Practical Demonstration & Participant exercises given by Course Instructors, with Supervisor in position at all times during practical exercises to assist participants</p>	<p>Learning Target 4 - (c, d & e)</p>

Course Lesson Plan - IADC Further Introduction to Offshore Safety (FIOS)

Module 6.0 First Aid –Practical:

Duration	Subject	Equipment	Location & Method	Learning Targets
60mins	<p>a) Awareness how to Rescue & Transport a Casualty:</p> <ul style="list-style-type: none"> ◆ Management of Shock ◆ Behaviour in Water ◆ Special Hypothermia Hazards <p>b) Perform Life Saving First Aid to:</p> <ul style="list-style-type: none"> ◆ Free the Airways ◆ Stop Bleeding ◆ Prevent Circulatory Failure ◆ Resuscitate a Casualty (CPR) ◆ Treat Burns, Broken Bones and Hypothermia 	<p>Visual Aids, Resuscitation Mannequins, First Aid Kits, Face Shields, Cleansing / Sterilising Wipes, Blankets, PPE, Examples of portable Onboard First Aid Equipment available (e.g. Defibrillator)</p>	<p><i>Classroom</i></p> <p>Explanation with a bias for Practical Demonstrations by Course Instructors of all elements and Participant exercises</p> <p>The emphasis being on Life Saving First Aid not Medical First Aid and Care</p>	<p>Learning Target 1 – (f)</p>

Course Lesson Plan - IADC Further Introduction to Offshore Safety (FIOS)

Module 7.0 Helicopter Safety and Escape Theory:

Duration	Subject	Equipment	Location & Method	Learning Targets
60mins	Pre Flight Safety & Response to Emergencies <ul style="list-style-type: none"> ◆ Common Helicopter Types ◆ Helicopter Safety, Flight Safety Briefings ◆ Escape routes and exit operation ◆ Emergency Procedures in various flight stages, Response to Safety Instructions ◆ Actions to take in Response to In-Flight incidents ◆ Awareness of Hazards Associated with Controlled Emergency Landing or Ditching ◆ Aircraft floatation characteristics 	Visual Aids, Video's / DVD's	<i>Classroom</i> Explanation by Course Instructors	Learning Target 2 - (a & b)

Course Lesson Plan - IADC Further Introduction to Offshore Safety (FIOS)

Module 8.0 Personal Survival Equipment, Helicopter Emergency Equipment & Response to Emergencies:

Duration	Subject	Equipment	Location & Method	Learning Targets
60mins	<p>b) Personal Survival Equipment (<i>if not undertaken as part of the Basic Introduction to Offshore Safety or Further Introduction to Offshore Safety Courses</i>)</p> <ul style="list-style-type: none"> ◆ Overview of Common Survival Suit Types in North West European use, including integrated suits ◆ Donning Survival Suit Common to Region ◆ Overview of Aviation Life Jackets ◆ Donning of Life Jacket ◆ Overview of Emergency Breathing Systems in Common Use ◆ Floatation Dynamics of Survival Suits, Life Jackets and Emergency Breathing Systems <p>d) Helicopter Emergency Equipment</p> <ul style="list-style-type: none"> ◆ Awareness of Onboard Equipment ◆ Awareness of & Response to Alarms & In-Flight Emergency Communications <p>e) Response to Emergencies</p> <ul style="list-style-type: none"> ◆ Personal Equipment Checks ◆ Brace Position ◆ Location & Operation of Exit Mechanism 	<p>Visual Aids, Video's / DVD's, Commonly used North West European Survival Suits, Aviation Lifejackets, Emergency Breathing System Equipment, Helicopter Passenger Seatbelt, Helicopter Liferaft and Emergency Equipment</p>	<p><i>Poolside Classroom & Helicopter Module</i></p> <p>Explanation with Practical Demonstrations by Course Instructors of all elements and Participant exercises</p>	<p>Learning Target 2 - (b) Learning Target 3 - (c, d & e)</p>

Course Lesson Plan - IADC Further Introduction to Offshore Safety (FIOS)

Module 9.0 Survival at Sea – Practical Helicopter Escape:

Duration	Subject	Equipment	Location & Method	Learning Targets
240mins	<p>d) Emergency Breathing System (EBS):</p> <ul style="list-style-type: none"> ◆ Overview of Equipment to be used including their safe working durations ◆ Donning & operation of emergency breathing system equipment ◆ Pre ditch checks ◆ Procedures to be followed ◆ Safety arrangements/procedures ◆ Methods of assessment ◆ Principles of emergency breathing equipment using compressed air ◆ Floatation dynamics associated with EBS <p>e) EBS Practical Exercises:</p> <ul style="list-style-type: none"> ◆ Donning Survival Suit, Aviation Lifejacket, Emergency Breathing Equipment and helmet ◆ Verify the integrity of the EBS unit ◆ Carry out breathing actions using EBS at atmospheric pressures in dry conditions ◆ Carry out breathing actions in pool environment, with positive and negative pressure created by body orientation in the water ◆ Moving through water in a submerged state with the aid of a guide line, with EBS fitted, from one side of the pool to the other 	<p>Visual Aids, Commonly used North West European Survival Suit, Aviation Lifejacket, Emergency Breathing System Equipment, Safety Helmets,</p>	<p><i>Pool, Poolside & Helicopter Module</i></p> <p>Explanation with Practical Demonstrations and Participant Exercises given by Course Instructors, with Divers & Pool Supervisor in position at all times during practical exercises to assist participants</p>	<p>Learning Target 2 - (b, c & d)</p>

Course Lesson Plan - IADC Further Introduction to Offshore Safety (FIOS)

Module 9.0 Survival at Sea – Practical Helicopter Escape continued:

Duration	Subject	Equipment	Location & Method	Learning Targets
	<p>SAFETY NOTE</p> <p>The maximum duration a delegate can be expected to breath off personal air in the EBS is 30 seconds.</p> <p>f) Helicopter Escape Practical Exercises:</p> <p>1). Emergency Dry Landing:</p> <ul style="list-style-type: none"> ◆ Escape, controlled by aircrew ◆ Operate an escape mechanism found on current helicopters <p>2). Water Surface Evacuation</p> <ul style="list-style-type: none"> ◆ Deploy EBS ◆ Escape by nominated exit into Helicopter liferaft ◆ Carry out vital & secondary actions in liferaft (may be undertaken at poolside) <p>3). Partial Submersion without EBS (upright)</p> <ul style="list-style-type: none"> ◆ Escape through an exit, which is underwater, but without a window and without using EBS <p>4). Partial Submersion using EBS (upright)</p> <ul style="list-style-type: none"> ◆ Escape through an exit, which is underwater, with a window fitted, using EBS 	<p>Survival Suit, Aviation Lifejacket, Emergency Breathing System Equipment, Safety Helmets, Helicopter Liferaft, Helicopter Module</p>	<p><i>Pool, Poolside & Helicopter Module</i></p> <p>Explanation with Practical Demonstrations and Participant Exercises given by Course Instructors, with Divers & Pool Supervisor in position at all times during practical exercises to assist participants</p>	<p>Learning Target 2 - (b, c & d)</p>

Course Lesson Plan - IADC Further Introduction to Offshore Safety (FIOS)

Module 9.0 Survival at Sea – Practical Helicopter Escape continued:

Duration	Subject	Equipment	Location & Method	Learning Targets
	<p>5). Capsize 180° using EBS</p> <ul style="list-style-type: none"> ◆ Deploy EBS on water surface prior to helicopter capsize ◆ Escape through an exit which is underwater, but without a window fitted <p>6). Capsize 180° using EBS</p> <ul style="list-style-type: none"> ◆ Deploy EBS on water surface prior to helicopter capsize ◆ Escape through an exit which is underwater, with a window fitted ◆ Inflate lifejacket on reaching surface and deploy spray hood ◆ Swim and form a survival circle ◆ Carry out group and individual survival techniques under supervision of instructor 	<p>Survival Suit, Aviation Lifejacket, Emergency Breathing System Equipment, Safety Helmets, Helicopter Liferaft, Helicopter Module</p>	<p><i>Pool, Poolside & Helicopter Module</i></p> <p>Explanation with Practical Demonstrations and Participant Exercises given by Course Instructors, with Divers & Pool Supervisor in position at all times during practical exercises to assist participants</p>	<p>Learning Target 2 - (b, c & d)</p>

Course Lesson Plan - IADC Further Introduction to Offshore Safety (FIOS)

Module 10.0 FIOS Debrief:

Duration	Subject	Equipment	Location & Method	Learning Targets
30mins	<p>On completion of pool exercises, all participants shall be given time to dry off and change, prior to assembling in a poolside classroom. The course instructor will then debrief the participants on the activities and exercises undertaken over the two days.</p> <p>Following which, the Instructor will ask the course participants if they have sustained any injury during the course that the training establishment is not aware of.</p> <p>The course instructor will ask all participants to complete the training establishments' feedback form for the IADC FIOS course.</p> <p>Any participant that has failed to meet the required learning targets will be advised and informed about the options available to them.</p> <p>Individual course certificates will be issued to all successful participants and a record entered into their IADC Training and Operations Passport.</p>	<p>Course feedback forms</p> <p>Course Certificate and validated record in participants IADC Training & Operations Passport</p>	<p><i>Classroom</i></p> <p>Question and Answer Session with Explanations as appropriate</p>	