



# NHC Training

Passionate about improving subsea safety worldwide





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Delivered by National Hyperbaric Centre, a part of JFD.





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## Trainee Air Diving Supervisor (IMCA)



### Course Overview

The Dive Supervisors Scheme was introduced in 1987 to provide a training and certification standard for air diving supervisors with a career structure detailed in document IMCA DO13 "IMCA Offshore Diving Supervisor and Life Support Technician Schemes".

This course is the first step for any IMCA diver wishing to further their career and become a supervisor.

### Course Content

The course is approved by IMCA and follows their guidelines. Experienced personnel will give instruction on the following topics:

- Diving Physics
- Anatomy & Physiology
- Plant & Equipment
- Legislation & Guidance
- Emergency Procedures
- Air Diving Emergencies
- Techniques/Procedures
- Safety on the Surface
- Air Diving from DP Vessels
- Leadership
- Nitrox

### Entry Requirement

- Have demonstrated competence as an offshore air diver and have completed 100 offshore commercial air dives prior to attending the course.
- AND hold an IMCA recognised surface supplied diving qualification as set out in the IMCA International Code of Practice for Offshore Diving.

Those with comparable training and experienced may be referred to the IMCA Scheme Administrator for a decision by the Assessment Panel.

### Certification

On completion of the course, after having successfully passed our in-house exams, each student is issued with a completion certificate for Assistant Air Diving Supervisor.

The IMCA Module 1 exam to become a fully qualified Air Diving Supervisor needs to be sat within 3 years of completing this course after having accumulated the necessary 200 panel hours as an assistant.

### Course Duration

5 Days

### Course Cost

£990 +VAT





# Trainee Bell Diving Supervisor (IMCA)



## Course Overview

The Bell Diving Scheme was introduced in 1987 to provide a training and certification standard for bell diving supervisors with a career structure detailed in document IMCA DO13 "IMCA Offshore Diving Supervisor and Life Support Technician Schemes". This course is the first step for any IMCA diver wishing to further their career and become a supervisor.

## Course Content

The course is approved by IMCA and follows their guidelines. Experienced personnel will give instruction on the following topics:

- Diving Physiology
- Dive Systems
- System Monitoring
- Hygiene
- Chamber Procedures
- Gas Handling
- Bell Handling Systems
- Diver & Emergency Evacuation
- Supervision & Leadership
- Legislation
- Life Support Duties

## Entry Requirement

- Have demonstrated competence as an offshore bell diver (mixed gas) and have completed 400 lockout hours prior to attending the course.
- AND have completed and passed an IMCA Air Diving Supervisor Course.
- AND hold an IMCA recognised surface supplied diving qualification as set out in the IMCA International Code of Practice for Offshore Diving.

Those with comparable training and experienced may be referred to the IMCA Scheme Administrator for a decision by the Assessment Panel.

## Certification

On completion of the course, after having successfully passed our in-house exams, each student is issued with a completion certificate for Assistant Bell Diving Supervisor.

Candidates are then required to go offshore and accumulate the necessary panel hours to sit the IMCA module 2 exam.

## Course Duration

4 Days

## Course Cost

£990 +VAT







## Assistant Life Support Technician (IMCA)



### Course Overview

Assistant Life Support Technicians assist Life Support personnel to carry out the vital and responsible job of maintaining safe conditions for divers living and working under pressure during saturation diving operations worldwide. They must be able to operate high pressure equipment, mix heliox diving mixtures, monitor the saturation chamber environment and as part of a team carry out pressurisation and decompression, identify and treat decompression illness and other pressure related injuries and be able to deal with a variety of emergency situations, from fire in the chamber to hyperbaric evacuation.

### Course Objectives

This training course is designed as a basic course for new entrants to the IMCA Life Support Technician scheme. The scheme commenced in 1984 to provide all personnel engaged in life support; from new entrants through to the most senior grade, with a structured career progression.

### Course Content

The course provides a comprehensive theory and practical element which prepares the new entrant for work as an Assistant Life Support Technician.

Experienced Diving and Life Support Supervisors provide professional tuition on the following topics:

- Diving Physics Legislation
- Gas Handling
- Gas Toxicity
- Thermal Balance
- Plant & Equipment
- Anatomy & Physiology
- Life Support Systems
- System Monitoring
- Emergencies
- Diving Systems
- Hygiene
- Practical

### Entry Requirement

No prior experience is needed, although a basic knowledge of physics would be an advantage.

### Certification

On completion of the course, and after having successfully passed the NHC in-house examinations, you are issued with an IMCA approved NHC Certificate. You must then go offshore and log a minimum 2,400 panel hours as an Assistant Life Support Technician, after which you can take the IMCA Life Support Technician exam.

### Course Duration

10 Days

### Course Cost

£1090 +VAT

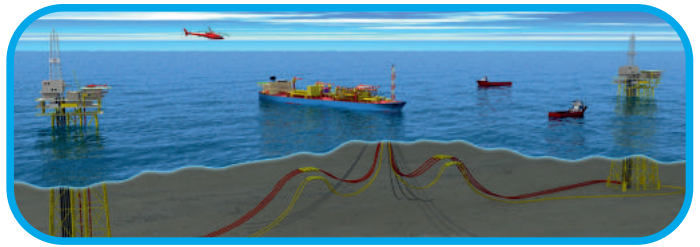




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# Basics of Offshore Operations

(non-technical)



## Course Overview

This introductory course provides non-technical personnel with an understanding and appreciation of offshore operations, from exploration, through to development and operation.

## Course Objectives

To familiarise personnel and provide an understanding of offshore operations, providing an insight into the industry as well as its capabilities and limitations. New-comers to the industry will benefit from the opportunity to learn industry terminologies, abbreviations etc in a clear and easy format. This course is suitable for workers who will be based both onshore or offshore, giving each an appreciation of the specific systems, operations, equipment and procedures they may encounter.

## Course Content

Professional tuition is provided by experienced personnel, combining comprehensive theory and practical sessions.

Topics include:

- History and development of Offshore Operations
- Oil & Gas
- Exploration
- Drilling Rigs
- Drilling a Well
- Exploration Drilling
- Development Drilling and Completion
- Oil & Gas Transportation

## Who Should Attend

This introductory course is aimed at people entering the industry, where knowledge of offshore operations may be required. The course is also suitable for existing staff and related companies who would benefit from wider exposure to the Offshore Industry.

## Entry Requirement

No prior experience is needed.

## Certification

On successful completion of the course delegates are awarded with the NHC Certificate of Training.

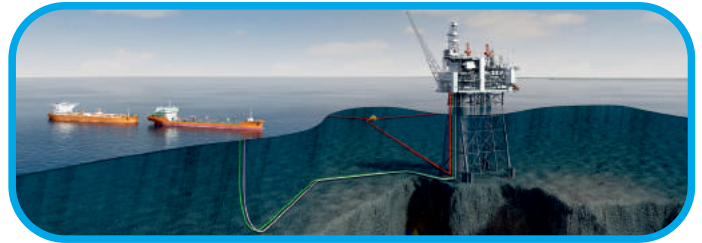
## Duration

One day.



# Basics of Offshore Operations

(technical)



## Course Overview

This introductory course provides technical personnel with an understanding and appreciation of offshore operations, from exploration, through to development and operation.

## Course Objectives

To familiarise personnel and provide an understanding of offshore operations, providing an insight into the industry as well as its capabilities and limitations. New-comers to the industry will benefit from the opportunity to learn industry terminologies, abbreviations etc in a clear and easy format. This course is suitable for workers who will be based both onshore or offshore, giving each an appreciation of the specific systems, operations, equipment and procedures they may encounter.

## Course Content

Professional tuition is provided by experienced personnel, combining comprehensive theory and practical sessions.

Topics include:

- History and development of Offshore Operations
- Oil & Gas
- Exploration
- Drilling Rigs
- Drilling a Well
- Exploration Drilling
- Development Drilling and Completion
- Oil & Gas Transportation

## Who Should Attend

This introductory course is aimed at people entering the industry, for example, managers, engineers, technicians and other personnel who, during their work, will be involved in using, directing or controlling operations where knowledge of Offshore Operations will be required. The course is also suitable for existing staff and related companies who would benefit from wider exposure to the Offshore Industry.

## Entry Requirement

No prior experience is needed.

## Certification

On successful completion of the course delegates are awarded with the NHC Certificate of Training.

## Duration

One day.



# Chamber Operator



## Course Overview

Chamber Supervisors/Operators carry out the vital tasks associated with the operation and safe use of re-compression chambers. They must be able to operate the chamber for treatments or for surface decompression.

## Course Objectives

The objectives of the course are to provide a theoretical and operational understanding of the physics and physiology of diving, to familiarise entrants with the current legislation and to provide a working knowledge of plant and equipment, gas systems, documentation and record keeping. The course is designed to provide practical experience of the correct operation of air chambers.

## Course Content

Experienced personnel will give instruction on the following topics:

- Role of Supervisor / Attendant
- Basic Diving Physics & Physiology
- Decompression Theory
- Decompression Illnesses
- Re-compression Methods
- Chamber Construction
- Chamber Hygiene & Hazards
- Legislation - UK
- Fire Safety & Accidents
- Chamber Medic
- Chamber Layout & Checks
- Practical Chamber Operation
- Emergency Procedures

## Entry Requirement

No prior experience is required for this course.

## Certification

On completion of the course, each student is issued with a NHC certificate of training.

## Course Duration

3 Days





# Client Representative



## Course Overview

This course is to provide delegates with a clear understanding of the roles and responsibilities of a recognised Client Representative. A Client Representative acts as the client's eyes and ears during the offshore phase of a project and is the client's prime method of monitoring the site from the point of view of safety and efficiency.

## Aims & Objectives

The course provides a comprehensive overview of offshore legislation and the common issues affecting offshore construction, diving and maritime operations. This course also provides an understanding of global and regional variances. Best Industry Practices and Guidelines are covered within sessions on IMCA (International Marine Contractors Association) and OGP (Association of Oil & Gas Producers) Diving Recommended Practice. This course is based on the contents of OGP 431 and its syllabus is endorsed by member of the OGP Diving Operations Sub-committee.

## Course Content

Subsea awareness from seabed to topside is covered to give delegates a greater understanding of the risks involved when working with subsea systems and covers identification of worksites and component items including isolations.

The course comprehensively covers communication, along with project reporting methods and techniques. Delegates will also get a good insight into people management skills during the leadership session.

Accident & Emergency situations are covered giving the delegate a good understanding of incident investigation & reporting. The course also covers emergency response procedures and the role the rep adopts in major critical situations.

- OGP 431 and 411
- Legislation & Guidance
- Local Rules & Regulations & Best Practice
- Leadership & Management
- OGP Culture & Ethics
- Prime Interfaces
- Risk Assessment & MOC
- Mobilisation
- PTW
- Subsea Awareness
- Project Reporting
- Accident & Emergency

## Entry Requirement

A copy of a current CV is required to ensure suitability.

## Certification

On successful completion of the course and passing the end of course exam, the delegates are issued with an NHC certificate of training complete with photographic ID and individual certificate number.

## Course Duration

5 Days

## Course Cost

£1925 +VAT



# Introduction to Diving



## Course Overview

This introductory course provides non-diving personnel with an understanding and appreciation of the principles of diving, various diving techniques, the equipment used in diving operations and the considerations on planning and executing diving operations.

## Course Objectives

To familiarise personnel with all aspects of operational diving and, in addition, provide an insight into diving capabilities and limitations.

## Course Content

Professional tuition is provided by experienced personnel, combining comprehensive theory and practical sessions.

Topics include:

- Principles of Diving
- Surface Supplied Diving
- Bell Diving
- Diving Legislation & Safety
- Underwater Operations
- Diving Accidents & Incidents
- Current Limits & Future Developments
- Complimentary Procedures

## Who Should Attend

This introductory course is aimed at managers, engineers, technicians and other non-diving personnel who, during their work, are involved in using, directing or controlling operations where the use of diving techniques are required.

## Entry Requirement

No prior experience is needed.

## Certification

On successful completion of the course delegates are awarded with the NHC Certificate of Training

## Duration

2 days

## Course Cost

£390 +VAT



# Dive Technician



## Course Overview

Dive Technicians carry out the vital and responsible job of maintaining diving equipment and diving systems. The importance of correct servicing and repair is recognised throughout the industry and proof of competency is now required.

Knowledge of saturation diving systems, air chambers, high pressure gas systems, diving helmets, compressors and oxygen cleaning procedures only touches upon this enormous subject.

This syllabus offers an excellent practical background of diving equipment and system maintenance as well as comprehension of relevant legislation, industry standards and systems including IMCA's DESIGN document and Planned Maintenance Systems.

## Course Objectives

Our Dive Technician course has been created to enable a person of technical background the ability to safely maintain much of the life support equipment found on dive sites in inshore and offshore diving environments.

This training course has been designed to enable rapid progression onto the Dive Technician Scheme. Completion of this module prepares the new entrant for practical work as a workshop trainee.

## Course Content

Experienced Diving and Life Support Technicians provide professional classroom and practical tuition including modules on the following topics:

- Industry Overview
- Diving Techniques
- Legislation
- Diving Physics
- Effects of Pressure on Divers
- Diving Systems
- Planned Maintenance Systems
- Plant & Equipment
- Life Support Systems
- Oxygen Cleaning
- Regulations and ACOPS for Diving Operations
- Industry Standards and Guidelines (IMCA)
- Gas Analysis
- Gas Handling, fittings, valves, reducers
- Diver & Chamber Reclaim System
- Gauges
- Breathing Resistance and Equipment Testing
- BIBS
- First Stages
- Umbilicals
- Compressors
- Tescom Regulators
- Pressure Testing
- Lift Bags
- Hot Water Systems
- Suits and Repair
- Harnesses
- Swageing
- Pipe Bending
- Air Dive System Mobilisation
- Air Dive System Commissioning

## Entry Requirement

Candidates should have completed a recognised trade apprenticeship in a relevant technical trade. CV to be submitted for verification.

## Certification

On completion of the course, each student is issued with a NHC certificate of competence.

## Course Duration

10 Days

## Course Cost

£2420 +VAT



# Diver Medic Technician (IMCA)



## Course Overview

Major Diving operators worldwide require at least one Diver Medic as a pre-requisite for both saturation and air diving team selection world-wide. IMCA also advise that all divers should complete a Diver Medic Technician course as part of their diver training.

## Course Objectives

To be deemed capable of administering first aid and emergency treatment, and efficient in carrying out the directions of a doctor in a diving environment.

## Course Content

Topics include:

- Casualty Handling Under Pressure
- Care of Medical Equipment/Record Keeping
- Diving Related Illness: Barotraumas, DCI, Decompression Illness
- Control & Management of Dive Related Injury or Illness
- Insertion of Chest Drain
- Patient Examination
- Basic Anatomy & Physiology
- Intraosseous Infusion
- Advanced Life Support / Use of Defibrillator
- Oxygen Administration

## Entry Requirement

To qualify for an IMCA Diver Medic qualification, applicants must:

- Hold an offshore qualification in diving: LST, diving supervisor or diving qualification recognised by IMCA (Offshore grade).
- Hold a valid diving medical suitable to go under pressure in a chamber. Sports diving or UKOOA medicals are not acceptable.

If you do not hold both of these requirements candidates will be issued with an NHC Certificate. Please contact the National Hyperbaric Centre who will be happy to provide you with further information.

## Why choose NHC?

- The National Hyperbaric Centre Diver Medic Technician course includes intensive practical modules inside our unique Saturation System which allows candidates to experience the restraints and difficulties of practising diving medicine in confined conditions along with learning the restrictions of equipment for use under such pressure. Previous students have felt they have benefited from such a realistic training experience which best prepares them for a real-life situation.
- Detailed theoretical modules are taught by Stuart Sloan, our permanent Medical Trainer who is passionate in providing high quality and intensive training. Stuart has vast experience within the military and oil & gas industries working as a medic in some of the most challenging and remote environments.
- Being situated within the Aberdeen Royal Infirmary campus and housing the NHS Hyperbaric Medical Facility, NHC is lucky to have the support of some of the best diving doctors in the country who teach modules of the course.
- Students are given the opportunity to take part in a placement within neighbouring ARI Accident and Emergency department for one or multiple evenings during the course duration. Within this busy medical emergency department, students will have the opportunity to practice their new skills within a very real environment.
- The course makes use of modern training aids corresponding to the DMAC 015 offering realistic and practical training.

## Certification

On successful completion of the course delegates are given the relevant certification of training. This certificate is valid for 2 years from date of issue.

## Course Duration

10 Days

## Course Cost

£695 +VAT





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# Diver Medic Technician Refresher (IMCA)



## Course Overview

This 5 day refresher course has been designed for those wishing to renew their IMCA Diver Medic Technician Certificate.

## Course Content

The National Hyperbaric Centre Diver Medic course combines intensive practical modules with detailed theoretical modules to offer high quality intensive training in diving procedures and diving medicine provided by experienced medics and diving doctors. The course makes use of modern training aids corresponding to the DMAC 015 medical kits to offer realistic practical training to Diver Medic delegates.

Topics include:

- Casualty Handling Under Pressure
- Care of Medical Equipment/Record Keeping
- Diving Related Illness: Barotraumas, DCI, Decompression Illness
- Advanced Life Support
- Control & Management of Dive Related Injury or Illness
- Insertion of Chest Drain
- Patient Examination
- Basic Anatomy & Physiology
- Intraosseous Infusion
- Use of Defibrillator
- Oxygen Administration

## Should you attend?

IMCA advise that all divers should hold this certificate. There is an 12 weeks prior & 8 weeks after grace period either side of the certificate expiry date to complete the refresher course, after this time you must complete the full course to renew your qualification.

## Entry Requirement

Attendees will be required to have undertaken a Diver Medic course and hold a full and valid Diver Medic certificate.

To qualify for an IMCA Diver Medic qualification, applicants must:

- Hold an offshore qualification in diving. This can be an LST, diving supervisor or diving qualification recognised by IMCA (Offshore grade).
- Hold a valid diving medical as suitable to go under pressure in a chamber. Sports diving or UKOOA medicals are not acceptable.

If you do not hold both of these requirements candidates will be issued with an NHC Certificate. Please contact the National Hyperbaric Centre who will be happy to provide you with further information.

## Certification

On successful completion of the course delegates are given the relevant certification of training. This certificate is valid for 2 years from date of issue.

## Course Duration

5 Days

## Course Cost

£495 +VAT







# Dive System Auditing & Assurance



## Course Overview

Auditing and Assurance is crucial within diving systems and diving operations to guarantee the safety and reliability of equipment and procedures. Therefore it is essential that all diving systems are audited by a competent auditor periodically or post mobilisation.

Recent changes in industry standards and attitudes have raised the requirement for system audits and the competency of dive system auditors. Guidance has been reviewed and developed and auditors are now advised to have appropriate operational knowledge and have undergone formal training in auditing techniques.

## Aims & Objectives

To enable delegates to become competent and fully aware of dive system auditing procedures, developing knowledge of industry recommendations and best practice. The course follows the related global industry standards within the relevant IMCA and D.E.S.I.G.N documents.

## Course content

Our course is made up of theory elements within the classroom which are complemented with practical sessions utilising the NHC's Saturation dive system. Our fully functional chambers precisely simulate the processes carried out by dive systems allowing candidates to get the most accurate and detailed experience possible. This course can be facilitated worldwide where we would locate a similar local diving system for practical elements.

Theory elements will include:

- Why audit dive systems?
- The role of the auditor
- IMCA D018, D023, D024, D037, D040
- Development of D.E.S.I.G.N audits
- Certification and PMS
- Certifying Authorities
- Accidents and lessons learnt
- Completing audit documentation
- Planning and preparation for an audit
- Reporting and closing meetings
- Closing out audit findings

## Trainers

The NHC's trainers are highly knowledgeable professionals who have extensive experience of auditing diving systems throughout the globe.

## Entry Requirements

A copy of a current CV is required to ensure suitability, it is preferred delegates have experience in air and saturation diving operations, ideally as a Dive Supervisor, Life Support Supervisor, Senior Dive Systems Technician or similar.

## Course Duration

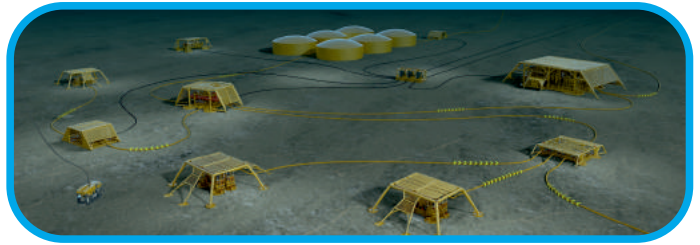
3 days

## Course Cost

£1100 +VAT



# Fundamentals of Subsea



## Course Overview

Subsea Systems have been used since the 1940s in order to exploit valuable oil reserves in deep waters. Over the past few decades, the industry has seen rapid development and the complexity and capability of these systems is vast. Subsea systems can now operate at depths of over 3000m in harsh conditions, so this highly specialised field requires particular engineering considerations and demands.

## Course Objectives

This course has been designed to familiarise personnel and provide an understanding of subsea operations, providing an insight into the design, capability and limitations of subsea systems, equipment and procedures.

## Course Content

Topics include:

- Introduction to subsea construction operations
- The subsea operating environment
- The subsea vessel as a work platform
- Global navigation
- Subsea positioning systems
- Subsea survey
- Subsea integrity
- Subsea installations
- Subsea Diving and ROV operations
- Subsea Measurement
- Subsea system integration
- Inspection, repair and maintenance

## Who Should Attend

This introductory course is aimed at any personnel who may already work in relation to the subsea sector, or are new to, or looking to enter the industry. It would also be of benefit to managers, engineers and support personnel, working in subsea construction, planning, maintenance or support, who need to be aware of current construction techniques and operational risks.

## Course Leader

Alistair Birnie, EDB Professor of Subsea Engineering at the National University of Singapore, has 35 years experience in subsea and offshore engineering having graduated from Robert Gordon University, Aberdeen as a Chartered Engineer. He is the Managing Director of Denmore Technologies Ltd

## Entry Requirement

No prior experience is needed.

## Certification

On successful completion of the course delegates are awarded with the NHC Certificate of Training.

## Duration

One day.



# Offshore Medic Diving Awareness



## Course Overview

Major Diving operators worldwide require the Offshore Medic to have prior knowledge of diving medicine when working on a remote dive site. This course has been developed to ensure that the Offshore Medic has been given the relevant knowledge and skills to deal with an emergency.

This course has been approved by the Institute of Remote Healthcare who are affiliated with the Royal College of Surgeons - Edinburgh.

## Course Objectives

To be deemed capable of administering first aid and emergency treatment, and efficient in carrying out the directions of a doctor in a diving environment.

## Course Content

The National Hyperbaric Centre Offshore Medic Diving Awareness course combines intensive practical modules inside our unique Saturation System with detailed theoretical modules to offer high quality intensive training in diving procedures and diving medicine provided by experienced Medics, Life Support Supervisors and Diving Doctors. The course makes use of modern training aids corresponding to the DMAC 015 medical kits to offer realistic practical training to delegates.

## Topics include:

- Principles and History of Diving
- Diving Physiology
- Diving Legislation and Safety
- Basic Anatomy and Physiology
- Diving Related Illnesses: Barotrauma, DCI, Decompression Illness
- Control and Management of Dive Related Injury/Illness
- Invasive Medical Procedures in Saturation Diving
- Patient Handling
- Care of Medical Equipment/Record Keeping
- Accident Investigations
- Telemedicine
- Tropical Diseases and Dangerous Marine Animals

## Entry Requirement

Pre-entry requirement for the Offshore Medics Diving Awareness course. To enroll you must have at least 3 years of experience as one of the following:

- a valid HSE Offshore Medic Certificate
- a registered general or enrolled nurse with name on the UKCC register
- a military medic army CMT, Navy MA, Air Force MA
- a state reg paramedic
- an operating department practitioner (fully qualified)

## Certification

On successful completion of the course delegates are given an IRHC TRaC approved certificate.

## Course Duration

5 days.



# ROV System Auditing & Assurance



## Course Overview

The Auditing and Assurance of diving systems has been integral to the offshore industry for many years. Now the majority of ROV companies and offshore operators are seeing the benefits of such audits to enhance safety and reduce operational downtime issues – and with this comes the requirement for trained and qualified personnel. As any client would expect, when a contract is given, assurance regarding the quality and reliability of the contractor's equipment is paramount. With the help of the NHC to champion the cause, this ROV System Auditing and Assurance course has been developed to offer potential delegates the opportunity to become competent and fully aware of the auditing process of ROV Systems to enable them in their role within the industry.

## Aims & Objectives

To enable delegates to become conversant with IMCA guidelines and industry requirements surrounding the auditing techniques, procedures and technical reporting of contractor's equipment.

## Course content

The course is comprised of two classroom days where industry guidelines and legislation will be explained in detail. These guidelines coupled with National Hyperbaric Centre's own recommendations to IMCA will be evaluated and explained to give students the knowledge needed to carry out audits to best practice and industry standards. Day three will enable students to get a 'hands on' approach by carrying out an actual audit of an ROV system. Students will be given the opportunity to use the knowledge gained on the course to prepare, plan and carry out the audit then close out their task with a report and findings session to discuss in the classroom.

Theory elements include:

- Why audit ROV systems?
- The role of the auditor
- IMCA R004, R005, R006, R009, R011, R018
- Certifying authority requirements (i.e DNV classification notes No.8)
- Audit development
- Planned maintenance
- Non-conformance
- Reporting
- Close out meetings

## Trainers

The NHC's trainers are highly knowledgeable professionals who have extensive experience of carrying out ROV Assurance Audits throughout the world. Having been involved closely with the development of guidance, products and services which ensure ROV systems can be audited correctly, the NHC are confident that this course gives candidates a thorough, detailed and accurate experience to the highest of standards.

## Entry Requirements

No prior experience is required, however it is preferred delegates have experience in ROV operations, this may be onshore or offshore based or in the role of ROV superintendent, ROV supervisor, Pilot Technician or anyone associates with ROV operations.

## Course Duration

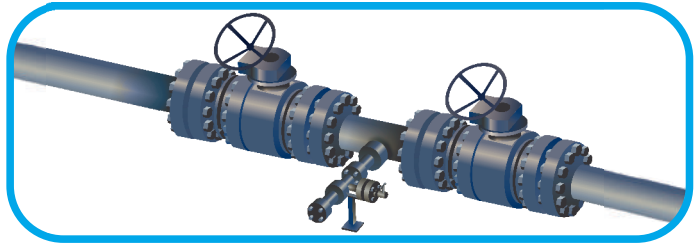
3 days

## Course Cost

£1100 +VAT



# Introduction to Subsea Isolations & Intervention



## Course Overview

This course has been developed to enhance diver safety when working near potential sources of stored energy in response to diving incidents regarding unplanned hydrocarbon releases and injury to personnel during subsea intervention projects in the oil and gas industry. The course will provide all persons involved with diving and subsea operations an awareness of the principles of subsea isolations from planning to completion both from platform control room to the subsea work site. The syllabus examines previous examples in the offshore environment and identifies potential work place hazards, teaching industry approved control measures including legislation and guidance.

## Course Objectives

This training course has been designed to provide candidates with the general principle of isolation, where the removal of hazards or sources of energy from within the system to be worked upon will be achieved, through the provision of an appropriate physical separation which can be confirmed to provide adequate disconnection of that system from any potential source of further energy.

## Course Content

Experienced subsea and diving personnel provide professional classroom and practical tuition including modules on the following topics:

- Basic Understanding and Familiarisation of Subsea Isolations
- Safety Moment Case Study
- Legislation HS(G) 253
- Industry Guidance (IMCA D044)
- Roles and Responsibilities
- Risk Assessment
- Petroleum Operations Notice (PON)
- Permit to Work (PTW)
- Isolation Confirmation Certificate (ICC) Isolation philosophies
- Piping and Instrumentation Diagram (P & ID)
- Degraded Isolations
- Leak off Rates
- Monitoring of Passing Isolations
- Barrier Testing
- Isolation Worked Examples

## Entry Requirement

Candidates should be employed within the oil and gas industry and be familiar with the concept of isolations and potential for stored energy. Typical candidates would be diving supervisors, client reps, platform control room operators, subsea engineers, Platform OIM, DSV OPM, client PM and anyone with a duty of care as per DWR 1997.

## Certification

On completion of the course, each student is issued with a NHC certificate of attendance.

## Course Duration

2.5 Days

## Course Cost

£985 +VAT





## Subsea Rigging & Lifting



### Course Overview

The Subsea Rigging & Lifting training course, assessment process and competence programmes have been developed in association with specialist lifting training company NSL to formally train divers involved with handling loads underwater and assess their ability to participate safely in lifting operations. It is also designed to benefit Dive Supervisors and Subsea Engineers to enhance their knowledge and understanding for safe lifting operations.

### Course Content

The first 2½ days are at the NSL technical training facility and the next 2½ days are at NHC which includes in-water exercises and assessments using NHC's large outdoor dive tank. The commercial dive spread is operated to IMCA standards using full video monitoring and hot water suits.

Topics covered:

- Legislation & Regulation
- Planning & Risk Assessment
- Pre-use Inspection of Equipment
- Handling Loads Underwater
- Safe Use of Air-lift Bags
- Slings/Rotating of Loads
- Cross-hauling Loads
- Lifting Loads with an Offset C of G
- Installation of Lifting Appliances
- Communications (Surface & Subsea)

### Entry Requirement

Qualified Commercial Divers with or without lifting experience, Dive Supervisors and Subsea Engineers.

### Certification

This new course is currently being reviewed by the industry with the aim to have it recognised by major trade associations, including IMCA, and accepted by HSE as an appropriate course and syllabus as part of a Competency based training scheme.

This is a pass or fail course run on an assessment basis. Successful candidates will receive an NHC Certificate in Subsea Rigging & Lifting which will assist their employers in proof of competence. Their certificate entitles them to continue rigging and lifting in the workplace under supervision and as part of a team working to plans created by competent persons. This rigging can be carried out topside or underwater.

Delegates can enter the competence programme where they are issued with a Level 1 or Level 2 logbook (depending on amount of previous experience) which contains specific performance criteria. The completed logbook is then assessed and verified prior to the award of a Certificate of Competence by EAL (UK Government award body).

### Course Duration

5 Days

### Course Cost

£1500 +VAT



# AGA Divator MkII Full Face Mask Maintainer Course TR011



This course provides delegates with the skills and knowledge required to correctly operate, maintain and service the AGA Divator MK11 Full Face Mask.

**Product Overview.** The AGA Divator MkII Mask is a high flow positive pressure mask, often used for contaminated water diving or hyperbaric welding.

**Course Content.** Course design has originated from using the Systems Approach to Training and is continuously enhanced by customer and client feedback. Experienced personnel will give instruction on the following topics:

- Introduction of the product and technical documentation
- Product performance and limitations
- Identifying design servicing requirements
- Discuss and practice operational procedures
- Discuss and practice maintenance routines
- Diagnosing equipment fault finding
- Identifying availability of spare parts
- Discuss and practice corrective maintenance

**Entry Requirement.** No prior experience is required for this course, however we do ask that you provide us with some information to ensure the course is suitable for you.

**Assessment.** The instructor will:

- Continually assess the candidates throughout the course to ensure that their practical and theoretical knowledge is sufficient to use and maintain the equipment.
- Administer a practical and written test to assess the attendees retained knowledge.
- Issue a written assessment. The written test is a multiple choice test paper with clearly outlined right and wrong answers.

**Certification.** Upon successful completion of the course, each student is issued with a certificate of training which is valid for 3 years. Renewal courses are available on request assuring that standards can be easily maintained.

**Course Duration.** One day.

**Course Cost.** £600.





# Kirby Morgan Helmet 2 Day Course TR009



This two day course is designed to provide candidates who have previous knowledge of KMDSI hats with the necessary skills for service and maintenance requirements.

**Overview.** This course is product specific to the customer's KMDSI (Kirby Morgan Dive Systems Inc) hat. Please specify which KMDSI hat you wish training for at time of ordering.

**Course Content.** Course design has originated from using the Systems Approach to Training and is continuously enhanced by customer and client feedback. Experienced personnel will give instruction on the following topics:

- Introduction of the product and technical documentation
- Product performance and limitations
- Identifying design servicing requirements
- Discuss and practice operational procedures
- Discuss and practice maintenance routines
- Diagnosing equipment fault finding
- Identifying availability of spare parts
- Discuss and practice corrective maintenance

**Entry Requirement.** The course duration will depend on your level of experience. For those with no previous experience with KMDSI hats then the 3 day course is applicable. If you have experience with KMDSI hats you may be eligible for this 2 day course.

Therefore if you wish to book a KMDSI training course please advise us any previous experience with Kirby Morgan helmets so that we may ensure the training duration is suitable for you.

**Assessment.** The instructor will:

- Continually assess the candidates throughout the course to ensure that their practical and theoretical knowledge is sufficient to use and maintain the equipment.
- Administer a practical and written test to assess the attendees retained knowledge.
- Issue a written assessment. The written test is a multiple choice test paper with clearly outlined right and wrong answers.

**Certification.** Upon successful completion of the course, each student is issued with a certificate of training which is valid for 3 years. Renewal courses are available on request assuring that standards can be easily maintained.

**Course Duration.** Two days.

**Course Cost.** £1200.



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# Kirby Morgan Helmet 3 Day Course TR010



The Kirby Morgan three day course is designed to provide candidates with a broad overview of KMDSI hats as well as teach the necessary skills for service and maintenance requirements.

**Overview.** This course is product specific to the customer's KMDSI (Kirby Morgan Dive Systems Inc) hat. Please specify which KMDSI hat you wish training for at time of ordering.

**Course Content.** Course design has originated from using the Systems Approach to Training and is continuously enhanced by customer and client feedback. Experienced personnel will give instruction on the following topics:

- Introduction of the product and technical documentation
- Product performance and limitations
- Identifying design servicing requirements
- Discuss and practice operational procedures
- Discuss and practice maintenance routines
- Diagnosing equipment fault finding
- Identifying availability of spare parts
- Discuss and practice corrective maintenance

**Entry Requirement.** The course duration will depend on your level of experience. For those with no previous experience with KMDSI hats then the 3 day course is applicable. If you have experience with KMDSI hats you may be eligible for this 2 day course.

Therefore if you wish to book a KMDSI training course please advise us any previous experience with Kirby Morgan helmets so that we may ensure the training duration is suitable for you.

**Assessment.** The instructor will:

- Continually assess the candidates throughout the course to ensure that their practical and theoretical knowledge is sufficient to use and maintain the equipment.
- Administer a practical and written test to assess the attendees retained knowledge.
- Issue a written assessment. The written test is a multiple choice test paper with clearly outlined right and wrong answers.

**Certification.** Upon successful completion of the course, each student is issued with a certificate of training which is valid for 3 years. Renewal courses are available on request assuring that standards can be easily maintained.

**Course Duration.** Three days.

**Course Cost.** £1800.



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# Poseidon Regulators Course

## TR013



At the end of this course, a technician will be confident in correctly operating and carrying out specific maintenance schedules on Poseidon Regulators.

**Product Overview.** The first regulator in the world with only one hose and the demand valve situated at the mouth, this was presented in 1958 and set a new world standard for diving regulators.

**Course Content.** Course design has originated from using the Systems Approach to Training and is continuously enhanced by customer and client feedback. Experienced personnel will give instruction on the following topics:

- Introduction of the product and technical documentation
- Product performance and limitations
- Identifying design servicing requirements
- Discuss and practice operational procedures
- Discuss and practice maintenance routines
- Diagnosing equipment fault finding
- Identifying availability of spare parts
- Discuss and practice corrective maintenance

**Entry Requirement.** No prior experience is required for this course, however we do ask that you provide us with some information to ensure the course is suitable for you.

**Assessment.** The instructor will:

- Continually assess the candidates throughout the course to ensure that their practical and theoretical knowledge is sufficient to use and maintain the equipment.
- Administer a practical and written test to assess the attendees retained knowledge.
- Issue a written assessment. The written test is a multiple choice test paper with clearly outlined right and wrong answers.

**Certification.** Upon successful completion of the course, each student is issued with a certificate of training which is valid for 3 years. Renewal courses are available on request assuring that standards can be easily maintained.

**Course Duration.** One day.

**Course Cost.** £600.







# Secondary Life Support (SLS MK IV) Servicing Course TR003



At the end of this course, a technician will be confident in correctly operating and carrying out specific maintenance schedules on the Secondary Life Support (SLS MK IV) equipment.

**Product Overview.** The Divex Secondary Life Support (SLS) System is an emergency breathing apparatus intended for use in the event of a fundamental failure of a diver's primary life support umbilical.

**Course Content.** Course design has originated from using the Systems Approach to Training and is continuously enhanced by customer and client feedback. Experienced personnel will give instruction on the following topics:

- Introduction of the product and technical documentation
- Product performance and limitations
- Identifying design servicing requirements
- Discuss and practice operational procedures
- Discuss and practice maintenance routines
- Diagnosing equipment fault finding
- Identifying availability of spare parts
- Discuss and practice corrective maintenance

**Entry Requirement.** No prior experience is required for this course, however we do ask that you provide us with some information to ensure the course is suitable for you.

**Assessment.** The instructor will:

- Continually assess the candidates throughout the course to ensure that their practical and theoretical knowledge is sufficient to use and maintain the equipment.
- Administer a practical and written test to assess the attendees retained knowledge.
- Issue a written assessment. The written test is a multiple choice test paper with clearly outlined right and wrong answers.

**Certification.** Upon successful completion of the course, each student is issued with a certificate of training which is valid for 3 years. Renewal courses are available on request assuring that standards can be easily maintained.

**Course Duration.** Three days.

**Course Cost.** £1800.



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# Tescom Regulators Maintenance Course TR008



This course aims to familiarise technicians with every aspect of the Tescom Regulator, its maintenance schedule and processes.

**Overview.** The course allows students to maintain TESCOM™ pressure reducing regulators so that the regulators in the field maintain desired outlet pressure providing the required flow to satisfy a variable downstream demand.

**Course Content.** Course design has originated from using the Systems Approach to Training and is continuously enhanced by customer and client feedback. Experienced personnel will give instruction on the following topics:

- Introduction of the product and technical documentation
- Product performance and limitations
- Identifying design servicing requirements
- Discuss and practice operational procedures
- Discuss and practice maintenance routines
- Diagnosing equipment fault finding
- Identifying availability of spare parts
- Discuss and practice corrective maintenance

**Entry Requirement.** No prior experience is required for this course, however we do ask that you provide us with some information to ensure the course is suitable for you.

**Assessment.** The instructor will:

- Continually assess the candidates throughout the course to ensure that their practical and theoretical knowledge is sufficient to use and maintain the equipment.
- Administer a practical and written test to assess the attendees retained knowledge.
- Issue a written assessment. The written test is a multiple choice test paper with clearly outlined right and wrong answers.

**Certification.** Upon successful completion of the course, each student is issued with a certificate of training which is valid for 3 years. Renewal courses are available on request assuring that standards can be easily maintained.

**Course Duration.** One day.

**Course Cost.** £600.





# Ultrajewel / Ultraflow 601 Maintenance Course TR005



This course provides delegates with the skills and knowledge required to correctly operate, maintain and service the Ultrajewel 601 range of Helium Gas Reclaim Helmets.

**Product Overview.** The Ultrajewel 601 range of Helium Gas Reclaim Helmets are the most efficient and reliable available to the commercial diver. When used with the Electric Gasmizer Diver Gas Recovery System, gas recovery is typically 90% or better.

**Course Content.** Course design has originated from using the Systems Approach to Training and is continuously enhanced by customer and client feedback. Experienced personnel will give instruction on the following topics:

- Introduction of the product and technical documentation
- Product performance and limitations
- Identifying design servicing requirements
- Discuss and practice operational procedures
- Discuss and practice maintenance routines
- Diagnosing equipment fault finding
- Identifying availability of spare parts
- Discuss and practice corrective maintenance

**Entry Requirement.** It is recommended that candidates should have previously attended a Kirby Morgan Helmet Course. We may ask that you provide us with some information to ensure the course is suitable for you.

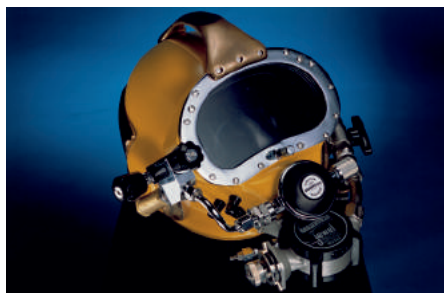
**Assessment.** The instructor will:

- Continually assess the candidates throughout the course to ensure that their practical and theoretical knowledge is sufficient to use and maintain the equipment.
- Administer a practical and written test to assess the attendees retained knowledge.
- Issue a written assessment. The written test is a multiple choice test paper with clearly outlined right and wrong answers.

**Certification.** Upon successful completion of the course, each student is issued with a certificate of training which is valid for 3 years. Renewal courses are available on request assuring that standards can be easily maintained.

**Course Duration.** One day.

**Course Cost.** £600.



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national **hyperbaric** centre

#### Other Departments

NHC Training  
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NHC Emergency Services  
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