



#### **1. ACRONYMS AND ABBREVIATIONS**

#### Α

| AAS | Alternative Air Source                               | AND  | Advanced Nitrox Diver  |
|-----|--|------|--|
| ABC | Airway, Breathing, Circulation (casualty assessment) | ANDI | American Nitrox Divers International                                   |
| ACI | Assistant Club Instructor (BSAC)                     | AP   | Ambient Pressure   |
| AD  | Advanced Diver (BSAC)                                | AR   | Ascent Rate  |
| AED | Automatic Emergency Defibrillator                    | ΑΤΑ  | Atmospheres Absolute   |
| AGE | Arterial gas embolism                                | ATM  | Atmosphere   |
| AI  | Advanced Instructor (BSAC)                           | AV   | Artificial Ventilation   |
| AIC | Advanced Instructor Course (BSAC)                    | AVPU | Alert, Voice, Pain, Unresponsive (simplified consciousness assessment) |

AIE Advanced Instructor Exam (BSAC)

#### В

| BA  | Breathing Apparatus            | BP   | Blood Pressure                      |
|-----|--------------------------------|------|-------------------------------------|
| BAR | Buoyancy, Air, Releases (BSAC) | BPM  | Beats Per Minute (heart/pulse rate) |
| BC  | Buoyancy Control               | BS   | British Standard                    |
| BCD | Buoyancy Control Device        | BSI  | British Standards Institute         |
| BDO | Branch Diving Officer          | BSAC | British Sub Aqua Club               |
| BH  | Boat Handling (BSAC)           | BT   | Bottom Time                         |
| BLS | Basic Life Support             |      |                                     |

#### С

| CAGE  | Cerebral Arterial Gas Embolism  |
|-------|---|
| CBL   | Controlled Buoyant Lift   |
| сс    | Cardiac Compressions  |
| СССМ  | Closed Chest Cardiac Massage superceded by ECM, and eventually CC                   |
| CCR   | Closed Circuit Rebreather   |
| CD    | Club Diver (BSAC)   |
| CEDIP | European Committee of Professional Diving<br>Instructors                            |
| CEN   | Comiteé Européenne de Normalization (The<br>European Committee for Standardisation) |
| CESA  | Controlled Emergency Swimming Ascent  |

| CI   | Club Instructor (BSAC)   |
|------|--|
| CMAS | Confederation Mondiale des Activities<br>Subaquatiques (World Underwater Federation) |
| CNS  | Central Nervous System   |
| со   | Carbon Monoxide  |
| CO2  | Carbon Dioxide   |
| CPF  | Chartwork & Position Fixing  |
| CPR  | Cardio Pulmonary Resuscitation   |
| СТС  | Current Tissue Code  |

### D

| DAN       | Diver's Alert Network         | DM  | Dive Marshal/Manager (BSAC) |
|-----------|-------------------------------|-----|-----------------------------|
| DCI / DCS | Decompression Illness         | DO  | Diving Officer              |
| DCC       | Decompression Computer        | DPM | Dive Planning & Marshalling |
| DCS       | Dive Control Specialist (SSI) | DPV | Diver Propulsion Vehicle    |





| DDC                         | Deck Decompression Chamber (offshore professional diving)   | Dr ABC                   | Danger, Response, Airway, Breathing,<br>Circulation (casualty assessment)   |
|-----------------------------|---|--------------------------|---|
| DDRC                        | Diving Diseases Research Centre   | DSMB                     | Delayed Surface Marker Buoy   |
| DER                         | Depth Experience Record   | DT                       | Dive Time   |
| DL                          | Dive Leader (BSAC)  | DV                       | Demand Valve  |
|                             |   |                          |   |
| E                           |   |                          |   |
| EAD                         | Equivalent Air Depth, or Effective Air Depth  | END                      | Equivalent Narcotic Depth   |
| EAR                         | Expired Air Resuscitation superceded by AV  | EO                       | Equipment Officer   |
| EANx                        | Enriched Air Nitrox   | EPIRB                    | Emergency Position Indicating Radio Beacon  |
| ECM                         | External Cardiac Massage (term superceded by CC)  | ERD                      | Extended Range Diver (BSAC)   |
| F                           |   |                          |   |
| FAD                         | First Aid for Divers  | FCD                      | Freeflow Control Device   |
| FCD                         | First Class Diver (BSAC)  | FEV(1)                   | Forced Expiratory Volume (in one second)  |
|                             |   |                          |   |
| G                           |   |                          |   |
| GMDSS                       | Global Maritime Distress and Safety System  | GPS                      | Global Positioning System   |
|                             |   |                          |   |
| н                           | Understand  |                          | Link lakes its Discharge  |
| H                           | Hydrogen  | HID                      | High Intensity Discharge  |
| ΠE                          | Hellum  |                          |   |
|                             |   |                          |   |
| IEC                         | Instructor Foundation Course  | ITS                      | Instructor Training Scheme (BSAC)   |
|                             | International Standards Organisation  | ITW                      | Instructor Training Workshop (BSAC)   |
| ITC                         | Instructor Training Course (BSAC)   |                          |   |
|                             |   |                          |   |
| к                           |   |                          |   |
| KISS                        | Keep It Simple, Stupid!   |                          |   |
|                             |   |                          |   |
| М                           |   |                          |   |
| MCQ                         |   |                          |   |
|                             | Multiple Choice Questionnaire (also known as  | MFS                      | Mask Fin Snorkel  |
|                             | Multiple Choice Questionnaire (also known as<br>Multiple Choice Paper)  | MFS                      | Mask Fin Snorkel  |
| MOD                         | Multiple Choice Questionnaire (also known as<br>Multiple Choice Paper)<br>Maximum Operating Depth   | MFS                      | Mask Fin Snorkel  |
| MOD                         | Multiple Choice Questionnaire (also known as<br>Multiple Choice Paper)<br>Maximum Operating Depth   | MFS                      | Mask Fin Snorkel  |
| MOD<br>N                    | Multiple Choice Questionnaire (also known as<br>Multiple Choice Paper)<br>Maximum Operating Depth   | MFS                      | Mask Fin Snorkel  |
| MOD<br>N<br>N2              | Multiple Choice Questionnaire (also known as<br>Multiple Choice Paper)<br>Maximum Operating Depth<br>Nitrogen                                   | MFS                      | Mask Fin Snorkel  |
| MOD<br>N<br>N2<br>NDL       | Multiple Choice Questionnaire (also known as<br>Multiple Choice Paper)<br>Maximum Operating Depth<br>Nitrogen<br>No-Decompression-Limit         | MFS<br>NO<br>NOAA        | Mask Fin Snorkel<br>Nitrox<br>National Oceanographic and Atmospheric<br>Administration                                    |
| MOD<br>N<br>N2<br>NDL<br>NE | Multiple Choice Questionnaire (also known as<br>Multiple Choice Paper)<br>Maximum Operating Depth<br>Nitrogen<br>No-Decompression-Limit<br>Neon | MFS<br>NO<br>NOAA<br>NQI | Mask Fin Snorkel<br>Nitrox<br>National Oceanographic and Atmospheric<br>Administration<br>Nationally Qualified Instructor |





| NI | National Instructor (BSAC) |
|----|----------------------------|
| NN | Nitrogen Narcosis          |

### 0

| 02     | Oxygen                       | OPV  | Over Pressure Valve                 |
|--------|------------------------------|------|-------------------------------------|
| OA/O2A | Oxygen Administration        | от   | Oxygen Toxicity                     |
| OAC    | Oxygen Administration Course | OWI  | Open Water Instructor (BSAC)        |
| OD     | Ocean Diver (BSAC)           | OWIC | Open Water Instructor Course (BSAC) |
| OMS    | Ocean Management Systems     |      |                                     |

#### Ρ

| PADI | Professional Association of Diving Instructors      | PPP    | Planning Preparation Presentation                  |
|------|---|--------|--|
| PAD  | Public Access Defibrillator (American term for AED) | PPPPPP | Perfect Planning Prevents Piss Poor<br>Performance |
| PNR  | Passenger Name Record                               | PRM    | Practical Rescue Management (BSAC)                 |
| PP   | Partial Pressure                                    | PSI    | Pounds per Square Inch                             |

QRB

Qualification Record Book

# Q

**QA** Quality Assurance

## R

| RA   | Rescue Assessment            | RFA        | Rescue First Aid             |
|------|------------------------------|------------|------------------------------|
| RAC  | Rebreather Awareness Course  | RIB / RhIB | Rigid hulled Inflatable Boat |
| RB   | Rescue Breathing             | RMV        | Respiratory Minute Volume    |
| REAP | Review Encourage Assess Plan | RNT        | Residual Nitrogen Time       |
| REG  | Regulator                    | ROV        | Remotely Operated Vehicle    |

### S

| SAA   | Sub Aqua Association                          | SI                      | Surface Interval                                     |
|-------|---|-------------------------|--|
| SALT  | Statement of Alternative Level Training       | SLJ                     | Surface Life Jacke                                   |
| SAR   | Search and Rescue                             | SMB Surface Marker Buoy |  |
| SC    | Surfacing Code                                | SNK Snorkel             |  |
| SCR   | Semi-closed Circuit Rebreather                | SOLAS                   | Safety of Life at Sea (int. maritim norm/convention) |
| SCUBA | Self Contained Underwater Breathing Apparatus | SPG                     | Submersible Pressure Gauge                           |
| SEEDS | Safety Equipment Exercise Discipline Signals  | SR                      | Search & Recovery                                    |
| SD    | Sports Diver (BSAC)                           | SWA                     | Sheltered Water Assessment                           |
| SDC   | Skill Development Course (BSAC)               | SWP                     | Safe Working Pressure                                |

## Т

| твт | Total Bottom Time | то | Training Officer |
|-----|-------------------|----|------------------|
| TD  | Technical Diver   | ТР | Test Pressure    |





| TLA<br>TLC    | Three Letter Acronym<br>Tender Loving Care                             | TPR<br>TSM | Transportable Pressure Receptacle<br>Technical Support Manager |
|---------------|--|------------|--|
| U<br>UPTD     | Unit Pulmonary Toxic Dose  | UBA        | Underwater Breathing Apparatus                                 |
| V<br>V<br>VIS | Visual (Inspection of air cylinder for test<br>purposes)<br>Visibility | VVDS       | Variable Volume Drysuit  |
| W<br>WB<br>WC | Weightbelt<br>Water Capacity   | WP         | Water Pressure, also Working Pressure                          |





#### 2. TERMS AND EXPRESSIONS

| Alpha (A) Flag        | International maritime signal flag. It signifies to boats that divers are in the water.  |
|-----------------------|--|
| Alternate Air Source  | A device that can be used when the primary regulator fails, in order to reach the surface safely while breathing normally.   |
| Ambient Light         | Natural light at depth.  |
| Ambient Pressure      | The absolute pressure at a certain depth, composed from the water pressure and the weight of the atmosphere.   |
| Apnoe                 | Apnoe is diving without technical equipment (free diving).   |
| Arterial Gas Embolism | Air bubbles from a ruptured lung enter the pulmonary circulation and travel from there to the arterial circulation. This can cause a stroke.   |
| Atmospheric Pressure  | The weight of the atmosphere is the pressure of the air around us. At sea level, this is about 14.7 pounds of pressure per square inch, or 1 bar.  |
| Barotrauma            | Unequal pressure between the ambient pressure and cavities within the body (e.g. sinuses), the inside of the mask or the inside of a dry suit can lead to injury. Types of injury include skin haematomas, torn ear drum, pneumothorax, blood filled sinuses and others.   |
| Bow                   | The front of a boat.   |
| Buddy                 | Scuba diving is not a sport for loners, as divers should always be with a buddy. From checking each other's gear before the dive, sharing the experience, to helping in an emergency, a competent buddy is an important part of safe scuba diving.   |
| Buoyancy              | Objects put in liquids displace part of the liquid. If the weight of the displaced liquid is less than the weight of the object, the object has negative buoyancy - it sinks. If the weight of the displaced liquid is more than the weight of the object, the object has positive buoyancy - it floats or rises to the surface when underwater. The mastering of buoyancy control is a key skill for good scuba diving. |
| C-card                | Certification card, proof that the diver has attained a certain standard of diving within one of the scuba organisations.  |
| Capillary Depth Gauge | Using Boyle's law, a small tube in the depth gauges is used to determine depth.  |
| Chokes                | Shortness of breath caused by bubbles entering the lungs and interfering with the gas exchange; can lead to death.   |
| Deco-Dive             | A dive exceeding the no-decompression limits. Decompression stops for the purpose of nitrogen off-<br>gassing are mandatory.   |
| Deco-mix              | A breathing gas for the express purpose of aiding nitrogen off-gassing during decompression stops, therefore containing a very high percentage of or 100 percent oxygen.   |
| Decompression Stop    | When diving outside the no-decompression limits (i.e. during a deco-dive) a specified amount of time must be spent at certain specific depths, for the purpose of nitrogen off-gassing.  |
| Dehydration           | The excessive loss of fluids from the body.  |
| Depth Gauge           | A device that indicates the depth of a diver, by measuring the water pressure.   |
| DIN-Valve             | Tank valve corresponding to the DIN (German Institute for Norms) norm. Normal valve for air scuba tanks in Germany, popular in Europe and world wide with tek divers. The regulator screws into the tank valve, ensuring a tight and safe fit.   |
| Dive Table            | A card with a matrix containing different depths, (no-decompression-)time at those depths and, where necessary, depth and length of decompression stops during ascent.<br>Dive tables are used to plan a dive in such a way that the diver avoids contracting DCI.   |





| Dry suit                          | An air-tight garment that completely covers the diver's body, apart from the head and the hands.<br>Instead of the layer of water between body and wet-suit, air or another suitable gas, like Argon,<br>provides insulation. Dry suits have an air-tight zipper and seals (normally made of latex) around the<br>neck and wrists. Special dry suit gloves are available, so only the head gets wet. Dry suits come in<br>different varieties, the most popular being those made of neoprene or trilaminate. Divers using the latter<br>need extra undergarments for added insulation.<br>Dry suits are the best choice for diving in cold water (below 10 degrees Celsius)   |
|-----------------------------------|---|
| Epilimnion                        | The layer of warmer water above a thermocline.  |
| Equalization                      | The process of restoring the pressure in cavities (such as sinuses and middle ear) and in the mask to ambient pressure.<br>When descending, the equalization of the middle ear is most easily achieved by closing your nostrils with your fingers and blowing through the blocked nose. The built up pressure opens the Eustachian tubes to the middle ear, thus making equalization possible. Equalization should be started early on during the descent, not just when you feel pain!<br>Equalization when ascending should happen automatically, although this might not be possible when the tubes are swollen (e.g. if you have a cold). Vertigo and/or a torn ear drum (tympanic membrane) can be the result. It is therefore not advisable to dive if you have a cold. |
| Exposure Suit                     | Any suit worn by a diver in order to prevent excessive loss of body heat. Can be divided into wet suits, semi-dry suits and dry-suits.  |
| First Stage                       | The part of the regulator which gets connected to the scuba tank valve. It reduces the tank pressure to about 9-11 bar over ambient pressure (depending on regulator).  |
| Free diving                       | Another term for Apnoe diving, i.e. diving without scuba equipment.   |
| Giant Stride                      | One of the ways to enter the water in full gear. Standing at the edge of a boat's dive platform or a dock, you take a step forward into the water.  |
| Halocline                         | An intersection between layers of fluids of different densities, the most relevant for divers being the intersection of fresh and sea water.  |
| HBO Chambers                      | Hyperbaric Oxygen Chambers - used to treat decompression sickness by recompressing the injured diver and then slowly decompressing him. Often this entails using 100 percent oxygen over a period of time.  |
| Heliox                            | Breathing gas mixture containing helium and oxygen. Used for deep dives, as the helium substitutes the nitrogen, thus reducing the danger of nitrogen narcosis. For dives deeper than 60m the percentage of oxygen is reduced to avoid oxygen toxidity (hypoxic heliox). At great depths (equals high partial pressure of helium) there is a risk of HPNS.<br>Sport divers often prefer trimix over heliox due to the lower costs of Trimix.  |
| High Pressure Hose                | Connects the first stage with the pressure gauge.   |
| High Pressure<br>Nervous Syndrome | Effect on the nervous system due to high gas pressure at depth, especially connected to helium. Can lead to involuntary muscle movements, convulsions and seizures.   |
| Hydrostatic testing               | Hydrostatic testing is used to check the tank's structural integrity  |
| Hyperthermia                      | The temperature of the body is higher than normal. Can occur through overheating in a wet suit when waiting in the sun while others are still getting dressed.  |
| Hypertonic                        | A liquid solution with more salt content than blood.  |
| Hyperventilation                  | Rapid and very shallow breathing. Lowers the level of CO2 in the blood which regulates the breathing impulse. Can lead to blackout.   |
| Hypolimnion                       | The layer of colder water below a thermocline.  |
| Hypothermia                       | The temperature of the body is lower than normal. Leads to severe problems if it drops to 35°C (95°F) and to death when the temperature is even lower for some time.  |
| Hypotonic                         | A liquid solution with less salt content than blood   |
| Hypoxemia                         | The level of oxygen in the blood is insufficient.   |





| In-gassing                    | With increasing pressure more gas is dissolved into a liquid, until the liquid is saturated (i.e. the amount of gas dissolving into and leaving the liquid is equal).   |
|-------------------------------|---|
| Live Aboard                   | A dive boat that offers sleeping and eating accommodation. The advantage of live aboards is the ability to get to dive spots that can't be reached by day trips.  |
| Low pressure Hose             | Connects the first stage to the 2nd stage or inflator.  |
| Nitrox                        | Any mixture of nitrogen and oxygen that contains more than the 21 percent oxygen found in ordinary air. Popular nitrox blends: 32, 36 and 40 (meaning they contain 32 percent, 36 percent and 40 percent O2). Other terms are: Enriched Air, Safe Air   |
| No Fly Time                   | Amount of time which should pass before a diver flies in a plane. Normally around 24h. This is done to avoid DCI.   |
| Off-gassing (Out-<br>gassing) | With decreasing pressure less gas is dissolved into a liquid than is given off, until the amount of gas dissolving into and leaving the liquid is equal.  |
| Pony Bottle                   | A small extra tank, often strapped to the main tank. It has its own regulator with first and second stages<br>and is used as an alternate air source in case of emergencies. Very popular in Britain, In Germany the<br>system of having a single tank with two independent regulators is more wide-spread. |
| Port                          | Left side of a boat when facing the front of the boat (bow).  |
| Pressure Gauge                | Device monitoring the amount of air left in the diver's tank. It is attached to the high pressure port of the regulator's first stage.  |
| Quick Releases                | The main buckles on the BCD and weight belt are normally quick releases, i.e. they can be opened quickly in case of emergency to ditch the BCD or weight belt.  |
| Rebreather                    | Also called Closed Circuit Rebreather (CCR) - a type of scuba equipment which re-uses the exhaled air by removing CO2 and adding O2. A CCS produces no bubbles and is noiseless, which make it an invaluable piece of equipment for naval divers.   |
| Repetitive Dive               | Dive after a previous one, where the surface interval was not sufficient to reduce the residual nitrogen levels back to normal sea level status.  |
| Reverse Squeeze               | When enclosed spaces in the body (e.g. sinuses, middle ear) are blocked, this leads to pain and injury during ascent.   |
| Safety Stop                   | Even when diving within the no-decompression limits, a safety stop at 3-5 metres for about 3 minutes is recommended for the purpose of nitrogen off-gassing.  |
| Semi-Closed<br>Rebreather     | A type of scuba equipment which re-uses most of the air exhaled by the diver, removing surplus CO2 and adding oxygen. As opposed to a Closed Circuit Rebreather, it gives off some bubbles.   |
| Second Stage                  | The part of the regulator put into the mouth to breathe through. The second stage reduces the pressure coming from the first stage (at around 10 bar over ambient pressure) to the ambient pressure.  |
| Single Dive                   | A dive where the nitrogen levels of all tissues are back to normal sea level status. Normally any dive with a previous surface interval of 12 - 24 hours and more.  |
| Snorkel                       | A tube with a mouthpiece, supplying the diver with air. The diameter should not exceed 25mm for adults and 15mm for children. The length should not exceed 35cm.  |
| Squeeze                       | Feeling of discomfort or pain caused by a drop in pressure in an enclosed space (sinuses, inside of the mask, inside of a dry suit) when not properly equalized.  |
| Stage Bottle                  | An extra bottle carried by the diver or deposited at a certain depth. The breathing gas contained in stages is very often a deco-mix.   |





| Starboard         | Right side of a boat when facing the front of the boat (bow).  |
|-------------------|--|
| Stern             | The rear of a boat.  |
| Surface Interval  | Length of time spent on the surface between two dives.   |
| Thermocline       | An intersection between a cold and a warm layer of water, normally with a distinct difference in temperature.  |
| Trimix            | Breathing gas mixture containing helium, nitrogen and oxygen. Used for deep dives, as the helium substitutes some of the nitrogen, thus reducing the danger of nitrogen narcosis (normoxic trimix). For very deep dives the percentage of oxygen is also reduced to avoid oxygen toxidity (hypoxic trimix). More popular than Heliox, as less of the (expensive) helium is used. |
| Tympanic Membrane | Medical term for ear drum.   |
| Weights           | On the surface a diver in a wet suit is very likely to be buoyant. Lead weights help to overcome this positive buoyancy and make you sink. In combination with a BCD-jacket they help the diver to control buoyancy during every stage of the dive.  |
| Wet Suit          | A suit (normally) made from neoprene that provides thermal protection in or under water. A layer of water is trapped between the diver's skin and the suit, acting as an additional insulation layer.  |
| Y Valve           | A tank valve with two outlets, so that two independent regulators can be attached to one bottle. Since the air supply can be cut off for each outlet, the freezing of one regulator doesn't lead to a complete air loss.   |