Extended Range

Overview

This course provides the training and experience required to undertake dives using air and/or Nitrox to depths down to 55meters that require staged decompression. The course also includes an introduction to Helium although the student will not be able to use Trimix unless the course is combined with the mixed gas programme. The most common equipment requirements, gear set-up, and decompression techniques are covered. The course is typically 4 days long consisting of a theory day followed by 3 days diving performing 2 dives each day. The course costs £450 each for 2 divers or £630 1 to 1.

Student Pre-Requisites

The student must:

- Be a minimum age of 18.
- Have a minimum certification of Advanced Nitrox Decompression Diver or equivalent.
- Show proof of at least 75 logged dives with 20 deeper than 30meters.

Equipment

The following equipment is required for each student in addition to their normal Scuba set up. Students can hire equipment they do not have their own from 3D Diving.

- 2 primary cylinders configured as a twin set with volume appropriate for planned dive and gas consumption.
- 2 Decompression cylinders. 7lt minimum.
- Dive computer or depth gauge and automatic bottom timer with back up.
- Regulators for both primary & Deco cylinders.
- BCD with adequate lift for equipment configuration, wing recommended.
- Reel with delayed surface marker buoy.
- Exposure suit adequate for the UK environment.
- Torch.
- Underwater slate.

Subject Areas

The PSA Extended Range Manual is provided for this course. The following topics are covered:

- History of extended range diving.
- Physical principles of extended range diving.
- Physiology of Nitrox and decompression diving.
- Decompression options.
- Equipment considerations.
- Decompression software and dive planning.

In order to complete this course, students must satisfactorily complete the PSA Extended Range written examination.

Skill Performance Requirements

The following open water skills must be completed by the student during open water dives safely and efficiently:

- Demonstrate adequate pre-dive planning.
- Conduct the planned dives within all pre-determined limits.
- Underwater problem solving.
- Perform decompression stops and gas switches whenever and wherever mandated.
- Demonstrate the correct deployment of a delayed SMB in less than 1 minute.
- Demonstrate the correct deployment of an emergency SMB mid-water.
- Demonstrate isolation of a malfunctioning regulator at a depth not exceeding 40 metres in less than 30 seconds (shutdown procedures).
- Perform at least 1 dive with 30 minutes of simulated or actual decompression.
- Perform at least 1 dive with a switch from travel to bottom mix during descent at the correct depth.

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